

Department of Energy

DRAFT

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EXECUTIVE OFFICE

In reply refer to: DFF-2

MEMORANDUM FOR THE DEPUTY SECRETARY

FROM: Stephen J. Wright
Deputy Administrator and Chief Executive Officer

SUBJECT: INFORMATION: FY 2003 OMB Budget Submission

Attached is Bonneville Power Administration's (Bonneville's) draft FY 2003 OMB Budget Submission. The final version will be submitted to OMB on September 10, 2001.

This FY 2003 budget includes capital estimates for Bonneville's planned infrastructure investments. Bonneville's remaining borrowing authority is not sufficient to fund all projects that have been identified to help relieve the West Coast energy problems. As a result, Bonneville will need approximately \$2 billion in additional borrowing authority. Legislative authority language providing the increase is included in the FY 2003 OMB Budget submission. Revenues through rates are assumed to recover expenses associated with these investments.

As part of the infrastructure initiative, Bonneville is revising its FY 2002 total capital obligations amount to \$494.1 million from \$374.5 million included in the FY 2002 Congressional Budget.

The following other legislative authority provisions are also included in this budget:

- provides the Administrator the authority to fund or offer benefits to temporary employees
- provides Bonneville with federal guard arming authority similar to the existing DOE authority.

Increased FTE levels in this budget document reflect strategic staffing efforts and infrastructure requirements. A more detailed memo to you on this topic has been sent separately.

Attachment: draft Bonneville FY 2003 OMB Budget Submission

cc:

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F E B R U A R Y 2 0 0 2

FY 2003 Budget Submission

for Congress

**BONNEVILLE
POWER ADMINISTRATION**



**DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION**

TABLE OF CONTENTS

Appropriation Language	
Proposed Appropriation Language	1
Explanation of Changes	1
Corporate Context	3
Executive Budget Summary	
Mission	5
Strategy	6
Overview	
Program Mission	9
Program Funding Profile	22
Overview of Detailed Program Justification	23
Capital Programs	
Power Services Business Line	25
Transmission Services Business Line	35
Capital Equipment/Capitalized Bond Premium	49
Operating Expenses	
Power Services Business Line	51
Transmission Services Business Line	59
Interest Expense, Pension & Post-Retirement Benefits, and Capital Transfers	65
Schedules	
BP-1, BP-2 (Current & Proposed), BP-3, and BP-4 (Current & Proposed)	69
Treasury Payment Table	83
Object Classification Statement	84
Proprietary Receipts	85
Fish and Wildlife Investment Table	86
Program and Financing	93
FTE Chart	95

Bonneville Power Administration

Proposed Appropriations Language

Expenditures from the Bonneville Power Administration Fund, established pursuant to Public Law 93-454, are approved for official reception and representation expenses in an amount not to exceed \$1,500.

During fiscal year [2002] *2003*, no new direct loan obligations may be made.

Explanation of Changes

The proposed appropriations language restricts new direct loans in FY 2003 as in FY 2002.

Energy Resources

Corporate Context

Energy is the vital force powering business, manufacturing, and movement of goods and services throughout the country. The United States spends over one-half trillion dollars annually for energy, and our economic well-being depends on reliable, affordable supplies of clean energy.

The Energy Resources goal establishes the overarching purpose of the Department's energy programs. The focus of three of the Department's program offices is on energy technology research and development (R&D): Office of Fossil Energy, Office of Nuclear Energy, and the Office of Energy Efficiency and Renewable Energy. In addition to energy technology R&D, the Department's Energy Information Administration develops and publishes energy statistics and forecasts, the Department also delivers Federal hydroelectric power to the consumer through the Power Marketing Administrations (PMAs).

Energy Resources Goal

Increase global energy security, maintain energy affordability, and reduce adverse environmental impacts associated with energy production, distribution, and use by developing and promoting advanced energy technologies, policies, and practices that efficiently increase domestic energy supply, diversity, productivity, and reliability.

Strategic Objective

The Energy Resources business line goal is supported by the following strategic objective of the PMAs:

ER9: Ensure Federal hydropower is marketed and delivered while passing the North American Electric Reliability Council's Control Compliance Ratings, meeting planned repayment targets, and achieving a recordable accident frequency rate at or below our safety performance standard.

Performance Indicators

North American Electric Reliability Council's (NERC) control compliance ratings

Repayment of Federal Power Investments

Recordable Accident Frequency Rate

Bonneville Power Administration

Executive Budget Summary

Mission

Bonneville Power Administration (Bonneville) is the Department of Energy's (DOE) electric power marketing administration for the Federal Columbia River Power System (FCRPS). Bonneville's mission is to meet its public responsibilities through commercially successful businesses. Bonneville's business strategies to fulfill its mission can be summarized as: meeting the electric energy market price; managing costs to be competitive in providing services to customers; strengthening Bonneville's financial position; and reorienting the organization to be responsive, flexible and competitive.

Bonneville's success in the marketplace supports the achievement of its vital responsibilities for fish and wildlife, energy conservation, renewable resources, and low-cost power for the people of the Pacific Northwest. Success is achieved by satisfying its customers and enhancing the economic and environmental health of the region. Bonneville values the individual diversity, entrepreneurial spirit, personal responsibility, and public service of its workers.

Bonneville provides electric power (about forty-five percent of the electricity consumed in the region), transmission (about three-fourths of the region's high voltage transmission capacity), and energy efficiency throughout the Pacific Northwest, a 300,000 square mile service area. Bonneville markets the electric power produced from 30 Federal hydro projects in the Pacific Northwest owned by the U.S. Army Corps of Engineers (Corps) and the U.S. Department of Interior, Bureau of Reclamation (Bureau), and also acquires non-Federal power to meet the needs of its customer utilities.

Congress created Bonneville in 1937 as part of the Bonneville Project Act, providing the foundation for Bonneville's statutory utility responsibilities and authorities. In 1974, passage of the Federal Columbia River Transmission System Act (Transmission System Act) placed Bonneville under provisions of the Government Corporation Control Act (31 U.S.C. 9101-9110). The Legislation provided Bonneville with "self-financing" authority and established the Bonneville Fund, a revolving fund, allowing Bonneville to use its revenues from electric ratepayers to directly fund all programs and to sell bonds to the U.S. Treasury to finance the region's high-voltage electric transmission system requirements. In 1980, enactment of the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act) expanded Bonneville's utility obligations and responsibilities to encourage electric energy conservation and develop renewable energy resources, and protect, mitigate and enhance the fish and wildlife of the Columbia River and its tributaries. In support of these expanded responsibilities, Bonneville's Treasury borrowing authority was expanded to allow the sale of bonds to finance conservation and other resources and to carry out fish and wildlife capital improvements.

Bonneville's program is mandatory and nondiscretionary. It receives no annual appropriations from Congress. Bonneville funds the expense portions of its budget and repays the Federal investment in the

FCRPS with revenues from electric rates. Bonneville is authorized to sell bonds to the Treasury up to a cumulative outstanding total of \$3.75 billion (permanent, indefinite borrowing authority). Through FY 2001, Bonneville has returned approximately \$17.1 billion to the Treasury for payment of FCRPS O&M (about \$2.7 billion), interest (about \$9.7 billion), and amortization (about \$4.9 billion) of appropriations and bonds. Bonneville made its full FY 2001 payment of \$729 million, including \$57 million in accelerated amortization from that stated in the Final 1996 Rate Case, and with over \$590 million in Fish Credits. For FY 2002, Bonneville plans to pay the Treasury \$730 million, of which \$239 million is to repay investment principal, \$452 million is for interest, and \$39 million is for Pension and Post-retirement Benefits. The FY 2003 Treasury payment is currently estimated at \$736 million.

Bonneville's FY 2003 budget has been prepared on the basis of its major areas of activity, Power and Transmission. This structure supports Bonneville's ability to become more competitive in the rapid restructuring of the deregulated wholesale electric energy market. This industry deregulation stems largely from the 1992 Energy Policy Act and ensuing Federal Energy Regulatory Commission (FERC) orders (FERC Orders 888 and 889) requiring separation of utility power and transmission functions. As a Federal agency, Bonneville is not subject to FERC jurisdiction, but chooses to comply with the FERC orders because it views compliance as essential to successfully compete in the current and future electric power market. Further, Bonneville supports DOE's October 1995 "Power Marketing Administration Open Access Policy." This budget reflects Bonneville's functional separation of power and transmission and its accounting and budgetary implementation of major activities.

Strategic Objective

ER9: Ensure Federal hydropower is marketed and delivered while passing the North American Electric Reliability Council's (NERC) Compliance Ratings, meeting planned repayment targets, and achieving a recordable accident frequency rate at or below our safety performance standard.

This strategic objective is supported by the Program Strategic Performance Goals that follow:

ER9-1: Maintain reliability in the evolving electric utility industry.

ER9-2: Establish and meet annual repayment targets for each Federal power system.

ER9-3: Ensure everyone at Bonneville is aware of, committed to, and has the tools to work safely.

Strategy

Bonneville's FY 2003 budget incorporates the budget decisions that Bonneville has made to remain competitive in the electric utility industry in the Pacific Northwest. These budget estimates, however, are subject to continual change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry in the Pacific Northwest.

The following table provides a summary of accrued expenditures.

FUNDING SUMMARY (accrued expenditures in thousands of dollars)

	FY 2001	FY 2002	FY 2003
CAPITAL INVESTMENTS			
Power Business Line	\$ 81,800	\$165,700	\$197,500
Transmission Business Line	\$182,700	\$300,000	\$405,500
Capital Equipment & Bond Premium	\$ 17,500	\$ 28,500	\$ 27,800
Total Capital Investments	\$282,000	\$494,200	\$630,800
Accrued expenditures will require budget obligations of	\$282,000	\$494,200	\$630,800
Operating Expenses	\$4,080,800	\$3,199,300	\$3,013,200
Projects Funded in Advance	\$17,800	\$25,000	\$25,000
 CAPITAL TRANSFERS (cash)	 \$236,300	 \$239,000	 \$247,300
BPA NET OUTLAYS	\$624,000	-\$102,000	-\$5,000
BPA STAFFING (FTE)	2,880	3,259	3,278



Stephen J. Wright
Administrator and Chief Executive Officer

Date 1/24/02

Bonneville Power Administration

Program Mission

Overview

Bonneville provides electric power, transmission and energy efficiency throughout the Pacific Northwest. Created in 1937 to market and transmit the power produced by the Bonneville Dam on the Columbia River, Congress has since then directed Bonneville to sell at wholesale the electrical power produced from 30 Federal hydro projects and to acquire non-Federal power and conservation resources sufficient to meet the needs of Bonneville's customer utilities. Bonneville serves a 300,000 square mile area including Oregon, Washington, Idaho, Western Montana, and parts of Northern California, Nevada, Utah and Wyoming.

The Transmission System Act placed Bonneville under the provisions of the Government Corporation Control Act (31 U.S.C. 9101-9110) and allows Bonneville to use its revenue from electric ratepayers to fund all programs directly through the Bonneville revolving fund, and to sell bonds to the Treasury to finance the region's high voltage transmission requirements. The Northwest Power Act expanded Bonneville's utility obligations and responsibilities to meet requesting utility loads, encourage conservation and develop renewable resources, and to protect, mitigate and enhance the fish and wildlife of the Columbia River and its tributaries. In support of these responsibilities, Bonneville's borrowing authority was expanded to allow the sale of bonds to finance conservation and other resources and to carry out fish and wildlife capital improvements. This Act also required regional energy plans and programs and created the Northwest Power Planning Council (Planning Council).

Bonneville is "self-financed" by the electric ratepayers of the Pacific Northwest and receives no annual appropriations from Congress. The revenue-generating and rate-setting authorities of the Bonneville Project Act of 1937 and the Northwest Power Act provide Bonneville's statutory budget authority. Under the Transmission System Act, Bonneville funds the expense portion of its budget and repays the Federal investment with revenues from electric rates. Bonneville's revenues fluctuate primarily in response to market prices for fuels and stream flow variations in the Columbia River System due to weather conditions and fish recovery needs. Bonneville's permanent, indefinite statutory borrowing authority authorizes the agency to sell bonds to the Treasury up to a cumulative outstanding total of \$3.75 billion. Through FY 2000, Bonneville has returned approximately \$17.1 billion to the Treasury in interest, amortization, and repayment of Federal power generation, operation, maintenance, and construction costs. Bonneville made its full FY 2001 payment of \$729 million, including \$57 million in accelerated amortization from that stated in the Final 1996 Rate Case. Bonneville's projected total Treasury payments for FY 2002 and FY 2003 are \$730 million and \$736 million, respectively.

Treasury payment estimates for interest and amortization levels are based on ratecase estimates updated for planned infrastructure investments. These estimates may change due to revised

capital investment plans, actual Treasury borrowing, and accelerated amortization payments. In previous years BPA has accelerated its scheduled amortization payments, including \$227 million over amounts stated in the 1996 Final Rate Case. Bonneville may make additional, unscheduled payments when fiscal conditions permit, rather than hold large cash balances in the Bonneville fund. In the event that Bonneville is unable to make full scheduled Treasury payments in subsequent years, these accelerated payments will be called upon to show the extent to which Bonneville is current in its Treasury payments over time.

Starting in FY 1997, Bonneville began direct funding the Bureau Pacific Northwest power O&M costs and in FY 1999 began direct funding Corps Pacific Northwest power O&M costs. Bonneville began direct funding the U.S. Fish and Wildlife Service (USFWS) in FY 2001 to pay for O&M costs of the Lower Snake River Compensation Plan facilities. Bonneville's direct funding arrangement includes a portion of power O&M capital investments. These costs, previously funded through appropriations, are now being paid through borrowing from the U.S. Treasury without additional BPA borrowing authority.

Bonneville's FY 2003 budget has been prepared on the basis of its major areas of activity, Power and Transmission. This structure supports Bonneville's competitiveness in the rapidly restructuring deregulated wholesale electric energy market. This industry deregulation stems largely from the 1992 Energy Policy Act and ensuing FERC Orders 888 and 889 requiring separation of utilities power and transmission functions. As a Federal agency, Bonneville is not subject to FERC's jurisdiction, but chooses to comply with the FERC orders because it views compliance as essential to successfully compete in the current and future electric power market. Further, Bonneville supports DOE's October 1995 "Power Marketing Administration Open Access Policy." This budget reflects Bonneville's functional separation of power and transmission and its accounting and budgetary implementation of business lines (BLs). This budget proposes FY 2003 accrued expenditures of \$3,013 million for operating expenses, \$25 million for Projects Funded in Advance, \$631 million for capital investments, and \$247 million for capital transfers.

Spending levels in this budget are still subject to change to accommodate competitive dynamics in the region's energy markets, debt service refinancing strategies, and the continued restructuring of the electric industry.

Program Mission

The strategic mission of Bonneville is to meet its public responsibilities through commercially successful businesses.

Bonneville provides electric power, transmission, and energy services in increasingly competitive markets. Bonneville's success in the marketplace supports the achievement of its vital responsibilities for fish and wildlife, energy conservation, renewable resources, and low-cost power for the people of the Pacific Northwest. Bonneville succeeds by satisfying its customers and enhancing the economic and environmental health of the region.

Bonneville will remain the least-cost producer and a creative and flexible marketer in the region. Its success will help ensure economically strong Pacific Northwest communities.

Bonneville values the individual diversity, entrepreneurial spirit, personal responsibility, and public service of its workers. Bonneville welcomes new ideas and is accessible to the citizens of the Pacific Northwest.

Strategic Objective

ER9: Ensure Federal hydropower is marketed and delivered while passing the North American Electric Reliability Council's Control Compliance Ratings, meeting planned repayment targets, and achieving a recordable accident frequency rate at or below our safety performance standard.

Program Strategic Performance Goals

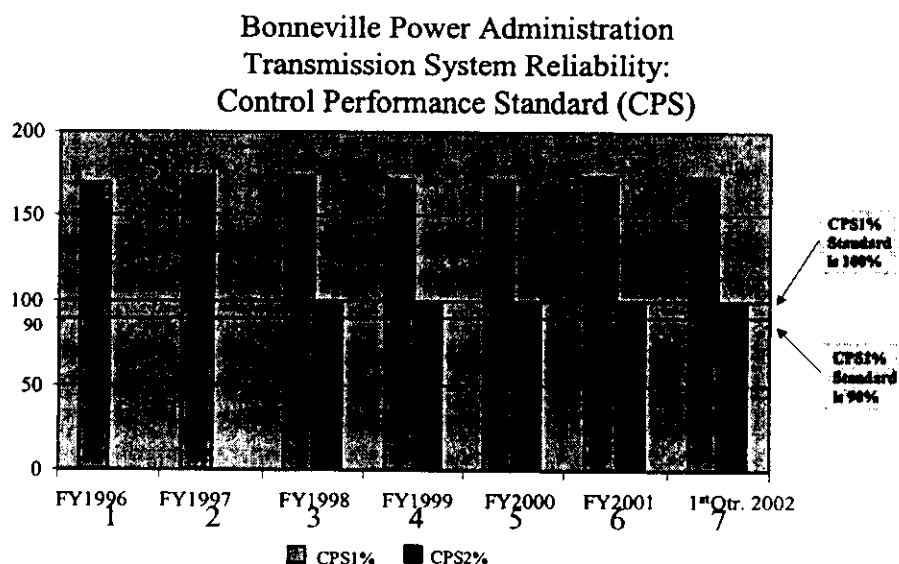
ER9-1: Maintain reliability in the evolving electric utility industry.

Performance Indicator

Receive monthly control compliance ratings that meet or exceed the Control Performance Standard (CPS) 1 and 2 established by the North American Electric Reliability Council (NERC).

This indicator defines a standard of minimum control performance. Each control area is to have the best operation above this minimum that can be achieved within the bounds of reasonable economic and physical limitations. Each control area shall monitor its control performance on a continuous basis against two standards, CPS1 and CPS2. These two standards have very defined technical requirements.

In FY 2001, Bonneville exceeded the minimum compliance level required by NERC with a CPS1 of 173.1% and a CPS2 of 98.7%.



Performance Standards

Blue/Green: Achieve "Pass" (CPS1 \geq 100;CPS2 \geq 90) on all 24 monthly standards for the year

Yellow/Red: Failure to achieve "Pass" on 23 monthly standards during the year

Red: Achieve "Pass" on 22 or less monthly standards during the year

Annual Performance Results and Targets

FY 2001 Results	FY 2002 Targets	FY 2003 Targets
Transmission System Performance: MET GOAL (ER2-5)	Receive monthly control compliance ratings of pass using the NERC performance standard. (ER2-5)	Receive monthly control compliance ratings that meet or exceed the CPS 1 and 2 established by the NERC. (ER9-1)

ER9-2: Establish and meet annual repayment targets for each Federal power system.

Performance Indicator

Meet planned annual repayment of principal on Federal power investments.

This indicator measures the variance of actual from planned principal payments to the U.S. Treasury. The indicator will be zero if the actual payment is equal to the planned payment.

Performance Standards

Blue: Achieve >105% of planned annual repayment

Green: Achieve 95%-105% of planned annual repayment

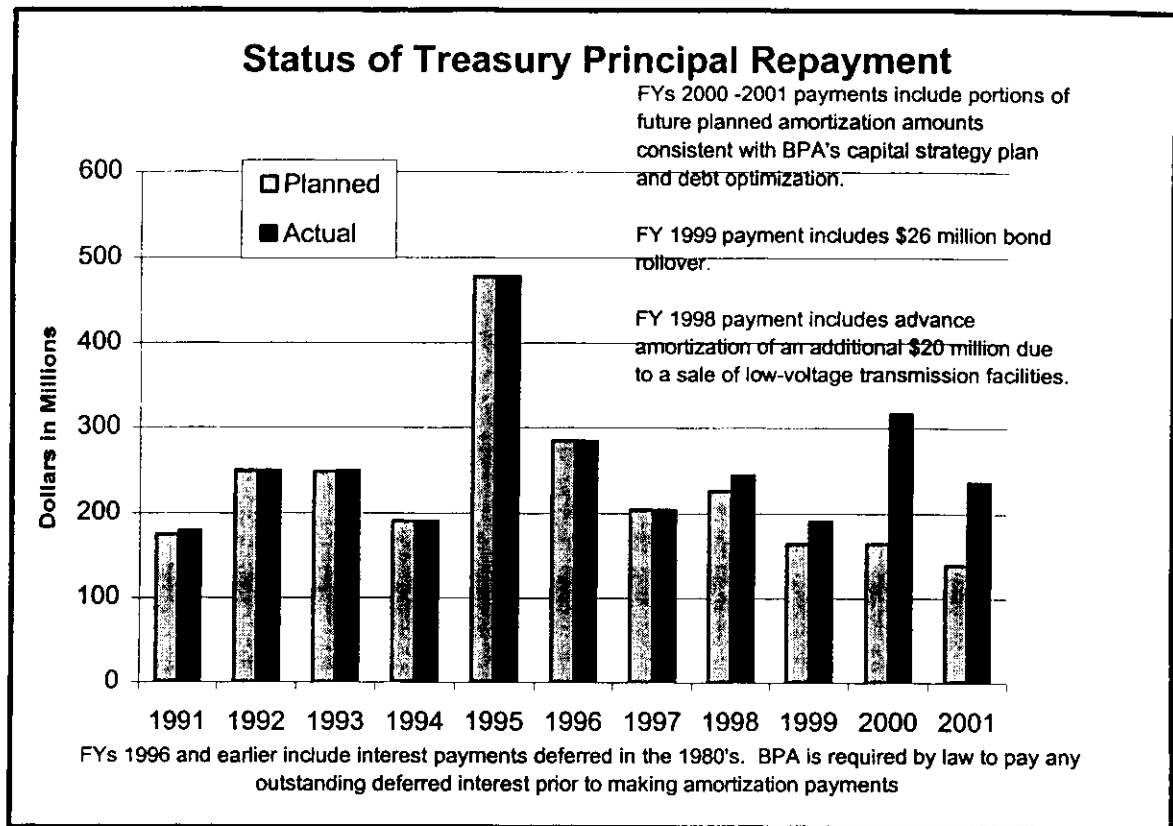
Yellow: Achieve 80-94% of planned annual repayment

Red: Achieve <80% of planned annual repayment

Annual Performance Results and Targets

FY 2001 Results	FY2002 Targets	FY 2003 Targets
Repayment of Federal Power Investment: MET GOAL (ER2-5)	Meet planned repayment of principal on power investments. (ER2-5)	Meet planned annual repayment of principal on Federal power investments. (ER9-2)

The following chart displays principal repayment only.



ER9-3: Ensure everyone at Bonneville is aware of, committed to, and has the tools to work safely.

Performance Indicator

Achieve a safety performance of not greater than a 3.3 recordable accident frequency rate for recordable injuries per 200,000 hours worked or the Bureau of Labor and Statistics' industry rate, whichever is lower.

This indicator measures the recordable accident frequency rate by first multiplying the number of recordable injuries by 200,000. This number is then divided by the total hours worked. The PMAs measure their performance against a Bureau of Labor and Statistics standard industry case rate.

The national average recordable injury frequency rate shown below is based on Bureau of Labor and Statistics. The Bureau of Labor's data is collected from organizations representing the private sector in the generation, transmission, and distribution of electric energy. The Bureau of Labor and Statistics includes a 2000 national average recordable injury frequency rate of 4.8 injuries per 200,000 hours worked. Bonneville's recordable injury frequency rate for FY 2001 was 2.0 injuries.

Performance Standards

Blue: Achieve 10% below a 3.3 rate or the Bureau of Labor Statistics' industry rate, whichever is lower

Green: Achieve 0-10% below a 3.3 rate or the Bureau of Labor Statistics' industry rate, whichever is lower

Yellow: Achieve 0-10% above a 3.3 rate or the Bureau of Labor Statistics' industry rate, whichever is lower

Red: achieve 10% above a 3.3 rate or the Bureau of Labor Statistics' industry rate, whichever is lower

Annual Performance Results and Targets

FY 2001 Results	FY2002 Targets	FY 2003 Targets
Safety: MET GOAL (ER2-5)	Achieve a safety performance of a 3.3 recordable accident frequency rate for recordable injuries per 200,000 hours worked or the Bureau of Labor and Statistics' industry rate, whichever is lower. (ER2-5)	Achieve a recordable accident frequency rate for recordable injuries per 200,000 hours worked of not greater than 3.3, or the Bureau of Labor Statistics' industry rate, whichever is lower. (ER9-3)

Significant Accomplishments and Program Shifts

- Bonneville's FY 2003 budget reflects the significant financial and business events of the past year that have shaped Bonneville's response to the ongoing competitive pressures of the region's electric utility industry. Throughout the past year, Bonneville has striven to enhance its competitive, cost-effective delivery of business-line utility products and services and continued delivery of the public benefits of its operations, while ensuring its ability to continue to make its payments to the Treasury on time and in full.
- BPA and the Pacific Northwest are facing a combination of power supply and economic challenges that are unprecedented in its history. Tight power supply conditions in the West Coast market and poor hydro conditions due to a drought have contributed to emergency power shortages in California and extremely high power purchase costs throughout the interconnected West in 2001. BPA's large purchases of power in 2001 drew heavily on its financial reserves and contributed to rate pressure. The drought and high power purchase costs also contributed to a large 4(H)10c revenue credit of \$342 million for FY2001. In addition, as a result of these market conditions BPA accessed the Fish Cost Contingency Fund in FY 2001 for the first time in history for \$247 million. The credit computation is subject to an annual true up. As in the past, fish credits may vary due to a variety of causes, including hydro conditions and market prices.

- Bonneville adopted a Power Subscription Strategy in 1998 to guide its power sales contracting and rates starting in FY 2002. The strategy which set the path for power rates for 2002 to 2006 included the following goals: to spread the benefits of the FCRPS as broadly as possible, with special attention to residential and rural customers; avoid an increase in the average price of lowest cost priority firm power; meet Bonneville's fish and wildlife obligations while assuring a high probability of U. S. Treasury payment; and provide incentives for the development of energy conservation and renewable resources. The Subscription process was concluded in October 2000 with total Subscription sales over 9,000 aMWs, about 1,500 aMWs higher than anticipated earlier. The increase in subscription sales meant that Bonneville would have to augment its power supply from other sources besides the federal system in order to meet all of its contractual commitments.
- Bonneville's rate setting for post 2001 established separate rate processes for the first time for the power and transmission functions. Bonneville concluded its power rate setting process for FYs 2002-2006 in May 2000 and submitted its rate proposal to the Federal Energy Regulatory Commission. Subsequently, extremely high volatility and price uncertainty in power markets led Bonneville to reexamine its rate proposal. As a result, Bonneville made the decision to amend its power rate proposal knowing that a significant rate increase was likely.
- In June 2001, after a public process, BPA submitted a supplemental power rate proposal to FERC and was subsequently granted interim approval in September 2001. This proposal focused primarily on modifications to proposed risk mitigation measures. BPA and many parties to the rate case collaboratively developed the terms of the proposal. A key feature of the proposal is a three-component cost recovery adjustment clause (CRAC): one component, the Load-Based CRAC tied to BPA's power system load, allows a rate adjustment every six months to reflect BPA's actual costs of purchasing power to augment the system. A second component, the Financial-Based CRAC based on BPA's financial status, allows a one-year rate increase in any year of the five-year rate period, to restore reserve levels if end-of-year accumulated net revenues drop below a threshold level. The third component, the Safety Net CRAC, allows BPA to change the parameters of the Financial-Based CRAC costs if BPA were to forecast missing a payment to the Treasury or other creditor, or actually misses such a payment. As in the original filing, the Supplemental Proposal continues to reflect implementation of Bonneville's fish and wildlife obligations while still maintaining the ability to make our planned payments to the U.S. Treasury on time and in full. The Load-Based CRAC in the Supplemental Proposal will have the effect of increasing initial rate levels for the rate period, based on market prices and the amount of load actually placed on BPA. The initial load-based CRAC will be in effect for the six-month period starting October 1, 2001, and is a 46% increase.
- A key step to keeping the power rate increase as low as possible was to implement a load reduction strategy designed to help bridge the gap between the amount of load on the system and the amount of power purchases required to meet that load. Bonneville, with help across all customer groups, was successful in reducing its load commitments by over 2,000 a MW. These load reductions vary in length of time, from a few months to up to two

years. Even with the successful results of the load reduction strategy, Bonneville still expects over the rate period to make significant power purchases in the market at prices higher than earlier anticipated. Given the volatility of the market, these purchases could be at substantially higher prices than earlier anticipated. However, once planned regional generation and transmission projects to meet load requirements are completed, the market price is expected to be significantly lower. Therefore, the load reduction efforts early in the rate period help to minimize BPA's market exposure.

- In contrast to the power rate case, the 2002 transmission and ancillary service rates were designed to be effective for FYs 2002 and 2003 rather than a five-year period. In view of FERC Order 2000, Bonneville and the parties to the transmission rate case and Open Access Transmission Tariff (OATT), expected the Northwest to form a Regional Transmission Organization (RTO) in the near future. The two-year transmission rate period was designed to bridge the gap between the expiration of the current 1996 rates and the formation of an RTO. In June 2000, Bonneville and parties to the transmission rate case and Open Access Transmission Tariff case agreed on a settlement to the substantive portion of proceedings. By proposing a settlement to the transmission proceedings, parties agreed that the time and resources required to follow a rigorous rate case schedule would detract from the important collaborative work of forming an RTO. This settlement allowed the region to more quickly move on to developing the RTO. FERC approved the transmission and ancillary service rates on a final basis in May 2001, and approved the OATT in March 2001.
- The primary factors behind the transmission and ancillary service rate increase are the cost of delivering services in a deregulated and restructured industry, the shift of some costs from power rates to ancillary service rates, the need to maintain system reliability, and the increased costs of recruiting and maintaining a highly skilled labor force. On average, the transmission and ancillary service rates are a very small portion of wholesale power costs and the impacts will vary from utility to utility. Bonneville expects to continue to maintain its position as a low cost transmission provider in the Northwest.
- In response to the unprecedented power supply and economic challenges facing the Northwest, Bonneville is working to help ease the West Coast energy crisis and help meet the region's long-term power and transmission infrastructure needs. Bonneville is currently planning infrastructure investments in the Pacific Northwest to meet Northwest transmission needs that will also continue a competitive wholesale market in the Western Interconnection that encompasses 15 western states, 2 Canadian provinces and 2 Mexican states.
- BPA has identified a number of actions that it is taking or could take over the next five years to provide additional electrical infrastructure relief. These actions include federal hydro generation efficiencies and additions, additional renewable resource generation and conservation efforts, long and short-term power purchases and construction of transmission projects that reinforce the grid and integrate new generation. As part of these efforts, Bonneville has designed a process to review and prioritize the investments. Part of this process, developed with stakeholder input, will provide investor-owned utilities and public

utilities an opportunity to evaluate proposed major transmission infrastructure additions for their cost, benefits, and their contribution to reliability, as well as schedules for project completions. Bonneville will also engage regional stakeholders in discussions to clarify needed generation improvements and conservation.

- Bonneville's remaining borrowing authority is not sufficient to fund all projects that have been identified to help relieve the region's infrastructure problems. As a result, this FY 2003 budget includes a legislative proposal to increase Bonneville's limit on borrowing authority by \$700 million. Bonneville will set rates to assure sufficient revenues to recover the expenses associated with these investments. Additional borrowing authority provides near-term funding relief for Bonneville's capital needs to meet its responsibilities and assure a reliable Northwest energy supply. In implementing the new borrowing authority, Bonneville will encourage private-sector or other non-federal financing or joint financing of transmission line expansions and additions, develop a five-year transmission investment plan with the participation of the regional Infrastructure Technical Review Committee or its successor in the region, use funds only for authorized purposes, include the proposed use of the funds in its annual budget submissions, and select projects based on cost effectiveness criteria for achieving the objective. See BP-2 Capital Investments Under Proposed Legislation, and BP-4 Status of Borrowing Under Proposed Legislation in the Schedules sections of this budget.
- Bonneville has also commenced a public process to explore non-federal financial participation in its transmission infrastructure projects through informal discussions with transmission customers and others in the region. These informal discussions have begun as a prelude to a more formal and more broadly directed solicitation of interest in such participation. This effort will be designed to obtain as much interest as is possible in cost effective and timely non-federal participation and financing of transmission infrastructure that can be operated and maintained integrally with the Federal grid. A set of principles for non-federal financial participation will be developed by BPA and publicly announced in OASIS/Federal Register postings in early 2002. That posting will start a formal schedule for soliciting interest in non-federal participation. The schedule will be sufficiently flexible to accommodate the level of interest expressed and the schedule of individual transmission projects.
- Updated expense estimates in this budget for FY 2002 and beyond, as well as capital estimates for FYs 2002 through 2003, are based on estimates from both the power and transmission rate cases. In addition, these estimates reflect the recent and significant changes affecting the West Coast power and transmission markets along with planned infrastructure investments designed to address the long-term needs of the region and other significant known changes. Capital estimates for FYs 2004 and beyond reflect reductions assumed from original estimated program levels, in order not to exceed Bonneville's current borrowing authority of \$3.75 billion. These outyear estimates reflect the amount of Treasury financing that could be used under the existing \$3.75 billion cap and do not reflect BPA program authority. FY 2001 costs are based on BPA unaudited actual costs. For a reconciliation to audited actuals, refer to DOE's audited FY 2001 financial statements.

- In response to FERC Order 2000 and consistent with the Administration's support for the development of efficient, reliable and competitive interstate electric markets, Bonneville is continuing to work closely with the region's investor-owned utilities as well as other stakeholder interests through a public collaborative process to design an RTO (RTO West) that meets FERC requirements and the specific needs of the Northwest. Goals of the RTO development include enhancing the overall reliability of the high voltage transmission system and providing an improved wholesale power market that will provide benefits for all Northwest ratepayers. The FERC Order 2000 required utilities to file RTO proposals with FERC by October 15, 2000, with the RTOs to be fully operating by December 15, 2001. The RTO West filing utilities submitted portions of the RTO proposal to FERC in October and December 2000. FERC responded to those filings with an April 26 Order, which included a request for follow-up on interregional coordination progress by Dec. 1. FERC also indicated flexibility with regards to the Dec. 15, 2001 operations date, given that RTO West shows sufficient progress towards start-up. A status report, consistent with the April 26 Order, was submitted on Dec. 1, 2001 by the filing utilities. Current efforts are to prepare a March 1, 2002 filing to FERC that will lay out the entire RTO West proposal. Potential payments to a RTO are not included in this budget.

- BPA efforts to keep its rates as low as possible are augmented by the implementation of the Bonneville Appropriations Refinancing Act (part of the Omnibus Consolidated Rescissions and Appropriations Act of 1996) that refinanced Bonneville's outstanding repayment obligations on appropriations. The legislation called for increasing low interest rates on historic appropriations to current Treasury market rates and resetting (reducing) the principal of FCRPS appropriations unpaid as of the end of FY 1996. New principal amounts were established as of the beginning of FY 1997, at the present value of the principal and annual interest payments Bonneville would make to the Treasury for these obligations in the absence of the Act, plus \$100 million. The new principal amounts were then assigned new interest rates based on the Treasury yield curve rates prevailing at the end of FY 1996. Bonneville's outstanding repayment obligation on appropriations at the end of FY 1996 was \$6.7 billion, with a weighted average interest rate of 3.4 percent. The refinancing reduced the principal amount to \$4.1 billion, with a weighted average interest rate of 7.1 percent. As called for in the legislation, Bonneville submitted its calculations and interest rate assignments implementing the refinancing to Treasury for their review and approval. Treasury approved the implementation transactions in July 1997.

- Consistent with assumptions for the power rate case and subscription strategy, Bonneville has reached a settlement of the Residential Exchange Program for regional utilities for the post-2001 period. Regional utilities were eligible to participate in the Residential Exchange Program beginning in 2001, except for the nine utilities that previously executed settlement agreements for terms beyond July 2001. To settle the Residential Exchange, Investor Owned Utility (IOU) customers will receive 1,900 average MW (aMW) in power and financial benefits at prices generally equivalent to the priority firm power rate. No settlement offer was made to Bonneville's preference customers, or public agency utilities, because none had forecasted average system costs that were sufficiently high to qualify for Residential Exchange benefits.

- As part of its continuing competitive efforts, BPA is working to further optimize debt service costs. BPA has reached agreement with Energy Northwest to pursue refinancing of certain Energy Northwest bonds. BPA pays the debt service on these bonds under the terms of earlier net billing agreements. A component of the refinancing strategy will be to extend the final maturity on the Columbia Generating Station (formerly WNP-2) debt. In addition, for Projects 1 and 3, some debt currently maturing prior to FY 2012 will be extended into the 2013-2018 time period. BPA has committed to Energy Northwest to use the reductions in debt service resulting from this extension to amortize Federal debt earlier than currently scheduled. Only under extreme financial pressure would this strategy be reconsidered. Implementation of the refinancing components will be subject to favorable market conditions and interest rate environment. Thus only the debt service savings of actual debt refinancings are included in cost estimates for this FY 2003 budget.

- Bonneville's competitiveness efforts have had a major impact on the agency's human resource levels, both Federal full-time equivalents (FTE) and contractor full-time equivalents (CFTE). In 1994, Bonneville established targets for reducing its workforce. As a result of cost cutting, reorganization, and the availability of Voluntary Separation Incentive (VSI) authority, Bonneville has achieved these target goals. As reflected in this budget, Bonneville has achieved FTE reductions resulting in a total of 2,880 FTE in FY 2001. In FY 2001, Bonneville continued to use VSI and Voluntary Early Retirement Authority (VERA) to target staff reduction in areas of decreasing skill needs. These reductions, however, have not completely offset our succession planning and infrastructure needs. As part of its strategic staffing efforts and infrastructure project requirements, Bonneville has identified a need for an increase in current FTE levels. This increase is designed in part to accommodate a shift in critical skills needed to meet the demands of succeeding in a deregulated energy market. Bonneville FTE projections included in this FY 2003 budget are 3,259 and 3,278 for FYs 2002 and 2003, respectively.

- Bonneville withdrew from the 248-megawatt Tenaska power project when, in 1995, demands on Bonneville for power dropped suddenly as the effects of wholesale electricity deregulation took hold. As a result, Tenaska Power Partners II (Tenaska) and Chase Manhattan Bank (Chase), which provided the project funding, sued Bonneville for damages. Bonneville settled the lawsuit with Chase in June 1996, agreeing to pay Chase \$115 million. Bonneville settled with several subcontractors of Tenaska for \$29 million in FY 1997 and \$13.7 million in FY 1998. In July 1998, arbitrators awarded Tenaska \$159 million which was paid directly from the U.S. Treasury's judgment fund in November 1998. Bonneville has fully reimbursed the Treasury for the judgment funds used plus interest, assuring that taxpayers are in no way affected by this award. In December 1998 Bonneville made its first reimbursement payment of \$80.4 million to the Judgment Fund Branch followed by annual payments of \$26.2 million in August of 1999, 2000 and 2001 for the remainder of the debt. Consistent with a Memorandum of Understanding with the U.S. Treasury, Bonneville made interest payments on the outstanding debt to the U.S. Treasury's "miscellaneous receipts" account.

- As Bonneville faced unprecedented challenges in continuing its service to the Pacific Northwest, the costs of Bonneville's commitment to rebuild salmon runs have risen

sharply. Congress and the Executive Branch have helped immensely by providing certainty to Bonneville's contribution to Northwest fish and wildlife restoration and mitigation. Bonneville, the Administration, and other agencies finalized an interagency agreement. The agreement ensured a stable level of fish and wildlife costs through 2001, while also confirming Bonneville's obligation to fund fish and wildlife activities for the 1995 Biological Opinion (BO) of the National Marine Fisheries Service (NMFS).

- This budget is consistent with the above interagency agreement that called for Bonneville fish and wildlife funding of \$252 million per year, on average, and hydro operation changes needed to implement the BOs on Endangered Species Act (ESA) listed species of approximately \$90-\$280 million per year for the period FY 1996 through FY 2001. Included with the budget schedules section of this budget document is the current tabulation of the history of Bonneville's fish and wildlife investments.
- Bonneville is committed to continue funding its share of the region's efforts to recover listed Columbia Basin fish and wildlife. In its power rate case, Bonneville incorporated fish funding principles that were developed and supported by a broad base of regional interests. Consistent with these principles, the rate case provides sufficient revenue to cover a range of fish recovery alternatives to ensure that funding will be adequate. The projected costs of implementing the Council's Fish and Wildlife Program and the most recent NMFS and USFWS Biological Opinions, released in December 2000, are well within the range of costs used in the rate case.
- Bonneville anticipates that implementation of fish and wildlife priorities will occur through a unified, integrated planning and implementation approach for the Council's Program and the reasonable and prudent alternative (RPA) actions described in the FCRPS BiOps. Many of the actions in the BiOps and the Council's Program overlap, particularly in the areas of habitat, hatchery and harvest offsite mitigation measures. It is Bonneville's desire that the Action Agencies' – Corps of Engineers (Corps), Bureau of Reclamation (Bureau), and Bonneville FCRPS Biological Opinion Implementation Plans, and the Council's Program through Provincial Reviews, will describe an integrated approach for the actions needed within the hydro system and off-site, to avoid jeopardizing the survival of the listed species and to protect, mitigate and enhance all fish and wildlife affected by the operation of the FCRPS.
- Bonneville believes future funding for fish recovery must be based on a regionally accepted basin wide strategy that addresses actions in habitat, harvest, hatcheries, and hydropower. To succeed, the plan must be scientifically credible, legally defensible, and it must be feasible. Bonneville is one of nine Federal Caucus agencies working to develop this basin wide strategy. In December, 2000, after an extensive public involvement effort, the Federal Caucus released its Final Basin wide Salmon Recovery Strategy (All-H Paper) to states and tribes. In that document, the Federal Caucus proposed the range of actions that are most likely to recover threatened and endangered aquatic species in the Columbia Basin. In order to ensure efficiency, eliminate overlap and omissions, and focus resources where they can best achieve results, the Federal Caucus agencies also proposed to coordinate funding requirements and proposals to be submitted through Federal budget

processes. The agencies intend to report on the availability of resources and implications for the agencies' ability to carry out the strategy. The Caucus is also collaborating with others as it reviews and updates its region's fish and wildlife program.

- The FY 1997 Energy and Water Development Appropriations Bill added section 4(h)(10)(D) to the Northwest Power Act, directing the Planning Council to appoint a Scientific Review Panel “to review projects proposed to be funded through that portion of Bonneville Power Administration’s fish and wildlife budget that implements the Planning Council’s fish and wildlife program.” And, “. . . in making its recommendations to Bonneville, the Planning Council shall consider the impact of ocean conditions on fish and wildlife populations; and shall determine whether the projects employ cost effective measures to achieve program objectives.” Consequently, projects funded under Bonneville’s direct program will be reviewed and prioritized as part of the Planning Council initiative process.
- Bonneville has adopted the following operating objectives for FY 2002: 1. Achieve high and continually improving customer satisfaction. -- BPA’s viability begins and ends with the customer. We must anticipate their needs and serve them with excellence. 2. Increase the value of our business and share the expanded benefits. -- BPA is more than a business, but BPA must succeed as a business in a competitive market if it is to carry out its legislative mandates. Market success gives BPA the financial strength necessary to deliver both commercial and public benefits. 3. Be a low-cost provider of power and transmission services in the region. -- The provision of low-cost power and transmission to the region is a principal reason for BPA’s existence. BPA’s commercial success also hinges on it – requiring constant pursuit of efficiency and optimizing the use of assets. 4. Achieve and maintain financial integrity. -- Financial integrity means each business line is recovering all costs, ensuring full and timely payments to creditors, including the U.S. Treasury, maintaining economic access to capital, providing high quality and timely information to BPA managers and other interested parties, and assessing and managing financial, operational and strategic risks. 5. Keep the system safe and reliable. -- BPA must strive continually to improve its record of safety and reliability. Safety is critical to our workforce and reliability is an important source of our value to the region. 6. Invest in results to enhance the region’s natural environment. -- The natural systems of the Pacific Northwest are valuable in their own right and essential to the quality of life of the people of the region. We must seek to have a light environmental footprint. 7. Transform BPA into a diverse, employee-centered, high-performing, business-oriented organization in which: employee development is supported; contributions are recognized; employees feel connected with the business; systems are fair and open; quality and quantity of communications are high; management focuses primarily on employees; and personal integrity, trust and respect are demonstrated.

Funding Profile^a

(dollars in thousands)

Fiscal Year

	2001 Actuals (unaudited)	2002 Original ^b	2002 Adjustments	2002 Revised	2003 Proposed
Capital Investment Obligations					
Associated Project Costs ^c	65,000	NA	-	105,000	117,000
Fish & Wildlife	16,800	NA	-	34,700	38,300
Conservation & Energy Efficiency ^c	-	NA	-	26,000	42,200
Subtotal, Power Business Line ^d	81,800	NA	-	165,700	197,500
Transmission Business Line ^c	182,700	NA	-	300,000	405,500
Capital Equipment	17,500	NA	-	28,500	27,800
Total, Capital Obligations ^c	282,000	374,500	-	494,200	630,800
Expensed and Other Obligations					
Expensed	4,060,600	2,547,000	-	3,199,300	3,013,200
Projects Funded in Advance	17,800	25,000	-	25,000	25,000
Total, Obligations ^e	4,360,400	2,946,500	-	3,718,500	3,669,000
Capital Transfers (cash) ^f	235,700	239,000	-	239,000	247,000
BPA TOTAL	4,596,100	3,185,500	-	3,957,500	3,916,000
Total Excluding Legislative Funding for Federal Retirements ^g	4,596,100	3,185,500	-	3,974,100	3,933,000
Full-time Equivalents (FTEs)	2,880	2,867	-	3,259	3,278

Public Law Authorizations, include:

Bonneville Project Act of 1937, Public Law No. 75-329, H.R. 7642

Federal Columbia River Transmission Act of 1974, Public Law No. 93-454 S. 3362

Regional Preference Act of 1964, Public Law No. 88-552

Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act), Public Law No. 96-501, S. 885

^a BPA's FY 2003 budget has been prepared in accord with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to discretionary "caps" in the BEA. These estimates support activities that are legally separate from discretionary activities and accounts. Thus, changes to BPA estimates cannot be used to affect any other budget categories such as domestic discretionary, or defense discretionary, which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a BEA "pay-as-you-go" test regarding its revision of funding estimates.

^b These estimates reflect BPA's FY 2002 Congressional Budget Submission.

^c Includes infrastructure investments designed to address the long-term needs of the Northwest and to reflect significant changes affecting BPA's power and transmission markets.

^d The Power Business Line includes Fish and Wildlife, Conservation & Energy Efficiency, and Associated Project costs in the Performance Summaries, and which appear separately in this table.

^e Includes short-term purchase power contract estimates for meeting load requirements.

^f Includes \$26 million Tenaska reimbursement payment for FY 2001.

^g See Interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates and the impact of proposed legislative funding.



Department of Energy
Washington, DC 20585

RECEIVED BY BPA ADMINISTRATOR'S OFC-LOG #: 01-0621
RECEIPT DATE: 11-06-01
DUE DATE: 11-15-01

Memorandum For: Stephen J. Wright
Acting Administrator
Bonneville Power Administration

ASSIGN: DF-2

From: Bruce M. Carnes
Director
Office of Management, Budget And Evaluation/CFO

cc: A-7, D-7, KN/Wash, T/Ditt2, TM/Dit
Mary Hawken-DFE-2, Bart Evans-KR-7

Date: November 5, 2001

Subject: OMB Request for Information

As part of the Administration's FY 2003 budget review process, the Office of Management and Budget (OMB) is evaluating Bonneville Power Administration's (BPA's) proposal to increase its borrowing authority. OMB feels they do not have sufficient information to determine whether the Government should allow additional debt to BPA and requests several items.

Mr. Marcus Peacock, OMB Associate Director for Natural Resource Programs, has officially requested DOE to provide the underlying data for the "Borrowing Authority to Support Infrastructure Investments" graph on page 39 of the Capital and Financing Requirements briefing that was presented to OMB on June 7, 2001 (see attached copy). Specifically, OMB wants to know what projects BPA expects to fund with its current authority and which projects it would fund with the additional authority. With the exception of the G-1 through G-9 transmission projects, OMB feels they have received little justification of the need for most of the projects. They need this information to understand the projects BPA proposes to fund and identify whether and how much of this authority is necessary now or could be postponed in favor of higher priority programs.

In addition, OMB has requested a general report on BPA's fiber optic cable investments. They believe that BPA is competing in the near-term with a number of private communications companies. Specifically, they want to know how much of the fiber is currently leased, how much is available for lease, and whether the program is meeting reasonable financial goals since it is currently being operated, in part, as a commercial venture.

Please provide information on these two items to the Office of Budget, as soon as possible, but no later than November 15, 2001. If you have any questions, please contact me or have your staff contact Ms. Gale Kabat, Office of Budget, on 202 586-2469.

Enclosure



its efforts to refine and implement the revised capital investment review process to improve the value provided.

Bonneville's second section of the performance summaries, entitled Annual Operating Expenses, includes accrued expenditures for business line and program activities financed by power sales and transmission services revenues and projects funded in advance. For FY 2003, budget expense obligations are estimated at \$3,013 million. The total program requirements of all Bonneville programs include estimated budget obligations of \$3,669 million in FY 2003.

Power Business Line - Capital

Mission Supporting Goals and Objectives

Associated Project Costs provide for direct funding of additions, improvements and replacements of existing Bureau of Reclamation (Bureau), and U.S. Army Corps of Engineers (Corps) hydroelectric projects in the Pacific Northwest. The Bureau and Corps provide power production, which is marketed by Bonneville, and invest in additions, improvements, and replacements that provide for increased performance and availability of generating units.

Maintaining the availability and increasing the efficiency of the FCRPS is critical to ensuring the region has an adequate, reliable and low-cost power system. The FCRPS represents about 80% of BPA's power supply, and is composed of 30 Federal hydro projects with over 200 generating units. These projects have an average age of just over 45 years, with some that exceed 60 years of age. Through direct funding, and the close cooperation of the Corps and Bureau, Bonneville uses its borrowing authority to make investments needed to restore generation availability and improve efficiency, eliminating demand on Corps and Bureau appropriations for power-related investments. Since the beginning of direct funding, Bonneville has significantly improved system performance - generation availability is up to 89 percent as of last year. In 1999, at the direction of Congress, BPA issued a report that it soon began to implement called the "Asset Management Strategy for the FCRPS." Bonneville concluded in this report that it needs to invest nearly \$1 billion in the projects over the next 12 –15 years. Without these investments, that are focused on restoring and maintaining the reliability of the system, history indicates that unit availability may decline at a rate of about 1.5% per year. Supplementary analysis, and experience with the system, has revealed additional investment needs above and beyond the levels originally planned under the Asset Management Strategy for the next two five-year periods.

These planned investments, included in these FY 2003 budget's funding estimates, will increase the output of the FCRPS. Moving forward with these cost-effective opportunities to expand the generation capability of the Federal system is a smart economic and environmental decision compared to purchasing power from the market to serve Pacific Northwest electricity needs.

The Fish and Wildlife program provides for the protection, enhancement and mitigation of Columbia River Basin fish and wildlife, due to losses attributed to the development and operation of hydroelectric projects on the Columbia River and its tributaries, pursuant to Section 4(h) of the Northwest Power Act. BPA satisfies a major portion of its fish and wildlife responsibilities and reduces the Administrator's obligation under the Northwest Power Act by funding projects and activities designed to be consistent with the Planning Council's Fish and Wildlife Program. BPA is also mandated to implement measures called for under the Endangered Species Act. These measures are part of the Biological Opinions (BOs) issued by the NMFS and the USFWS, regarding the operations of the Federal Columbia River hydro system.

Fish and Wildlife program estimates reflect, and are consistent with, the fish and wildlife principles that originally were identified in the 1996 Fish Budget MOA.

Bonneville has been working with the Planning Council, the Columbia Basin tribes, state and Federal agencies, and public interest groups to develop an expected range for Bonneville's fish and wildlife costs for FYs 2002-2006. As of July 2001 the total estimated annual average financial impact on Bonneville for the region's fish and wildlife programs ranges from \$438 million to over \$724 million per year. This range of costs was used to develop the power rate proposal for FYs 2002 – 2006. Bonneville's fish and wildlife costs are expected to be within the range described above, including capital, expenses, and lost revenues from spill.

Bonneville's fish and wildlife capital program is directed at activities that increase numbers of Columbia River Basin fish and wildlife resources including projects designed to increase juvenile and adult fish passage in tributaries and at mainstream dams, increase fish production and survival through construction of hatchery and acclimation facilities, fish monitoring facilities and fish habitat enhancement. Funding is also included for pre-engineering design and studies for new and developing projects. The priority for capital project funding will focus first on implementing the reasonable and prudent alternatives contained in the NMFS and USFWS Biological Opinions, and second on implementing the Planning Council's Fish and Wildlife Program. A current goal of the Planning Council, and one supported by Bonneville, is that projects funded under both Bonneville's direct program as well as the reimbursable and capital investment components of the other Federal agencies will be reviewed and prioritized as part of a regional planning initiative process.

The FY 1997 Energy and Water Appropriations bill added section 4(h)(10)(D) to the Northwest Power Act, directing the Power Council to appoint a Scientific Review Panel "to review projects proposed to be funded through that portion of Bonneville Power Administration's fish and wildlife budget that implements the Council's fish and wildlife program." And, "... in making its recommendations to BPA, the Council shall consider the impact of ocean conditions on fish and wildlife populations; and shall determine whether the projects employ cost effective measures to achieve program objectives." Consequently, projects funded under Bonneville's direct program will be reviewed and prioritized as part of the Planning Council's initiative process. The Conference Report on the FY 1999 Energy and Water Development Appropriations bill included a new assignment for the Independent Scientific Review Panel (ISRP) and the Planning Council. The ISRP was to review the fish and wildlife projects, programs, or measures included in Federal agency budgets that are reimbursed, and/or directly funded, by Bonneville and to make funding recommendations to Congress. The ISRP was directed to determine whether the proposals are consistent with the scientific criteria in the Northwest Power Act as amended in 1996, and provide a report to the Council by April 1 of each year. The Council, in turn, must report to the Congress annually by May 15.

When acquiring resources to meet planned future loads, the NW Power Act requires the Administrator to first consider and acquire resources through cost effective conservation to reduce load that the Administrator determines are consistent with the NW Power Planning Council's Power Plan. The Council's Power Plan specifies BPA's share of the regional, cost effective conservation target will be about 220 aMW by 2006. In addition, the Council's Plan further estimates that BPA's target will be another 250 aMW of conservation in the 2007 to 2011

period. BPA anticipates that between 100 and 225 aMW of this amount will be acquired under its augmentation strategy using BPA treasury borrowing authority.

Conservation is key to the recent effort to reduce BPA's power delivery obligations as a way of limiting the impact of volatile and high market prices on BPA's rates. With the current demand for FCRPS resources exceeding supply, BPA is augmenting the system to meet the obligations from customers signing subscription contracts. Conservation is an important part of BPA's augmentation portfolio. A diverse portfolio of resources that includes conservation provides a more reliable approach to meeting BPA's load obligations.

Long-term investments in energy efficiency help buffer the FCRPS against future resource uncertainties. During periods of price volatility, conservation also helps reduce financial risk associated with relying on the market for energy purchases in the future, because it keeps producing at the original cost incurred.

Bonneville also is exploring how best to integrate demand-side management, distributed generation, and other leading edge technologies into its resource portfolio through its Energy Web program.

Funding Schedule (Accrued Expenditures)

(dollars in thousands)					
	FY 2001	FY 2002	FY 2003	\$ Change	% Change
Associated Project Costs	65,000	105,000	117,000	+12,000	11.4%
Fish & Wildlife	16,800	34,700	38,300	+3,600	10.4%
Conservation & Energy Efficiency	0	26,000	42,200	+16,200	62.3%
Total, Power Business Line - Capital	81,800	165,700	197,500	+31,800	19.2%

Detailed Program Justification

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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Associated Project Costs	65,000	105,000	117,000
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Work with both the Corps and the Bureau to reach mutual agreement on those capital improvement projects that need to be budgeted and scheduled, are cost effective and are of mutual benefit to provide system or site specific enhancements, increase reliability, and efficiencies. These types of projects are in line with the DOE Strategic Objective ER-4 and associated PMA Program Strategic Performance and Goals as discussed earlier in this budget. It likewise supports several power performance objectives and targets.

The work is focused on improving the reliability of the FCRPS, increasing its generation efficiency through turbine runner replacements and optimization of hydro facility operation, development of new generation at existing Federal hydro sites, and small capital reimbursements associated with routine maintenance activities. In addition, limited investments may be made in joint use facilities that are beneficial to the FCRPS and its operation.

■ Corps of Engineers (known projects to date):

FY 2001: Continued work on Power System Reliability Improvement. Continued rewedging at Bonneville. Continued refurbishment/replacement of head gates and gantry crane at Bonneville. Continued development of main unit and station service breaker replacement program. Continued Ice Harbor exciter replacement. Continued rewedging at Little Goose. Continued work on oil/water separators at Lower Snake River projects. Continued work on replacing main unit annunciation at Chief Joseph. Started replacement of DC power supplies at John Day and The Dalles. Continued evaluation of new turbine runners at McNary. Continued hydro optimization investigations system wide.

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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FY 2002: Continue work on Power System Reliability Improvements. Continue refurbishment/replacement of head gates and gantry crane at Bonneville. Continue rewedging at Bonneville. Begin main unit and station service breaker replacements at selected projects. Complete Ice Harbor exciter replacement. Continue work on oil/water separators at Lower Snake River projects. Complete work on replacing main unit annunciation at Chief Joseph. Complete replacement of DC power supplies at John Day and The Dalles. Select a prototype turbine runner for McNary. Continue hydro optimization investigations system wide. Test prototype replacement governors at The Dalles. Complete design for Cougar modernization. Continue exciter replacements at John Day. Install battery system at McNary. Plus a variety of smaller continuing or new investments.

FY 2003: Complete work on Power System Reliability Improvements. Continue refurbishment/replacement of head gates and gantry crane at Bonneville. Continue rewedging at Bonneville. Continue main unit and station service breaker replacements at selected projects. Continue work on oil/water separators at Lower Snake River projects. Continue with turbine runner replacement and modernization at McNary. Continue hydro optimization investigations system wide. Begin replacement governors at selected projects. Begin Cougar modernization. Continue exciter replacements at John Day. Continue with 480-volt distribution replacement at Chief Joseph. Purchase replacement generator winding for Lower Granite. Plus a variety of smaller continuing or new investments.

■ **Bureau of Reclamation (known projects to date):**

FY 2001: Continued Grand Coulee transformer replacements. Continued Grand Coulee runner replacements. Continued Grand Coulee repairs associated with station service fire. Completed Grand Coulee and Hungry Horse CO2 replacements. Continued elevator rehabilitations at Grand Coulee. Started breaker replacement at Grand Coulee and other projects. Completed Hungry Horse energy efficiency upgrades. Completed Anderson Ranch transformer replacements. Continued Grand Coulee pump-generator circuit addition and transformer replacement.

FY 2002: Complete Grand Coulee transformer replacements. Continue Grand Coulee runner replacements. Continue Grand Coulee repairs associated with station service fire. Continue elevator rehabilitations at Grand Coulee. Continue breaker replacement at Grand Coulee and other projects. Continue Grand Coulee pump-generator circuit addition and transformer replacement. Continue with Hungry Horse life-safety modifications and a variety of smaller continuing or new investments.

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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FY 2003: Continue Grand Coulee runner replacements. Complete Grand Coulee repairs associated with station service fire. Continue elevator rehabilitations at Grand Coulee. Continue breaker replacement at Grand Coulee and other projects. Continue Grand Coulee pump-generator circuit addition and transformer replacement. Continue with Hungry Horse life-safety modifications. Purchase spare winding for Grand Coulee. Plus a variety of smaller continuing or new investments.

Fish and Wildlife	16,800	34,700	38,300
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Although the regional prioritization process and independent scientific review for projects to be recommended for funding in FY 2002 is not yet complete, and is not expected to be completed until early in FY 2002, the following projects are candidates for capital funding. It is BPA's intention to proceed with design and construction of those projects from this list that are recommended for funding within the available budget. The costs indicated are preliminary estimates only and actual costs may be greater or lower than those estimates depending on final design and construction costs.

FY 2002-2003 efforts include continued implementation of high priority Endangered Species Act related projects and activities associated with the FY 2000 FCRPS, NMFS, and USFWS Biological Opinions. Projects may include a supplementation and genetics research facility and a Hatchery Safety Net Program for up to ten ESA listed salmon and steelhead populations if determined to be necessary by formulation of Hatchery Genetic Management Plans and Genetic Risk Analyses. Implementation of reforms to hatchery programs may also be warranted as information on the types of changes to these facilities are established and priorities for sequencing implementation are developed through the Council's Artificial Production Review Committee. Projects that meet the Reasonable and Prudent Measures (RPA's) and other high priority measures in the NMFS and USFWS BO's are also described in the action agencies (Corps of Engineers and Bureau of Reclamation) Annual Implementation Plan for FY 2002.

- Anadromous fish supplementation facilities in the Yakima River Basin and Upper Snake River Basin include the following projects:
 - Mid-Columbia Coho Salmon Restoration. Based on Planning Council approval in FY 2000 for continued project implementation using the Hatchery and Genetics Management Plan. Continue feasibility studies for reintroduction of Coho in the Wenatchee and Methow Rivers. Determine feasibility of design and construction alternatives for Coho adult collection in addition to rearing and acclimation.

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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- The Yakima River Fall Chinook supplementation along the Yakima River near Yakima, Washington, is for the design and construction of fish rearing, acclimation, and adult collection facilities on the lower Yakima River and Marion Drain irrigation return canal. The design and construction is expected to continue. These activities will occur near the cities of Yakima and Prosser, Washington.

- Yakima River Coho Restoration. The purpose of this project is to determine the feasibility, design, and construction of acclimation sites in the Yakima River at various locations. This project may include producing Coho as part of the Yakama Nation's salmon enhancement program. The design and construction is expected to continue. A long-range goal of the Yakama Nation is to see the return of naturally spawning Coho back to the Yakima River.

- Yakima River Spring Chinook Supplementation Facility, located in Cle Elum, Washington. This project is for the construction of an interpretive building for public education and for the design and construction of a monitoring and evaluation building for use by project biologists.

- Johnson Creek Summer Chinook Salmon restoration in South Fork Salmon Basin of Idaho is to develop, construct, and implement facilities for adult collection and holding, juvenile rearing, and acclimation. The design and construction is expected to continue.

- The Upper Snake River Spring Chinook captive brood stock program includes juvenile fish acclimation sites and adult collection facilities located within the Grande Ronde River Basin in Northeast Oregon and captive Broodstock hatchery rearing facilities located at the Bonneville Dam site hatchery in Oregon and at the NMFS research station, Manchester, Washington. Also includes the potential initiation of the Northeast Oregon Hatchery Master Plan. This project, as a measure in the Planning Council's Fish & Wildlife Program, would identify and develop artificial propagation facilities to protect and enhance salmon and steelhead native to the Imnaha, Grande Ronde and Walla Walla River Basins.

- Upper Snake River Spring Chinook Salmon captive Broodstock acclimation and adult collection facilities will be located on the Upper Grande Ronde River near La Grande, Oregon, on the Catherine Creek near Union, Oregon, and on the Lostine River near Enterprise, Oregon. The design and construction is expected to continue.

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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- The resident trout fish culture facility in Southeast Idaho or the Snake River Resident Fish Production Facility will be located near Pocatello, Idaho. The purpose of this facility is for resident fish production as a substitute for the loss of anadromous fish due to the construction and operation of the FCRPS. This facility is intended to provide a supply of various species of trout for residents of the Duck Valley Indian Reservation, Nevada, and the Fort Hall Indian Reservation, Idaho. The facility involves the purchase of an existing hatchery facility and construction upgrades. The design and construction is expected to continue.
 - Construction on the Yakima River hatcheries. The design and construction is expected to continue.
 - Construction on the Umatilla River Hatchery Supplementation Facility. The design and construction is expected to continue.
 - Construction on the Yakima Screens Facilities Phase II. The design and construction is expected to continue.
 - Nez Perce Hatchery. The design and construction is expected to continue.
 - Nez Perce Tribe Resident Fish Substitution Program. The purpose of this program is to increase fish harvest opportunities to mitigate partially for anadromous and resident fish losses incurred as a result of the construction and operation of Dworshak Dam on the North Fork Clearwater River. The National Environmental Policy Act (NEPA) process and subsequent preliminary design process are on hold pending further scientific review. Once initiated, it is expected that the design and construction continue.
 - Coeur D'Alene Tribe Trout Production Facility. The purpose of this facility is to produce fish in support of on-going Couer D' Alene Tribal fisheries enhancement projects. Target species include Westslope cutthroat trout, Bull trout and Rainbow trout. The design and construction is expected to continue.
 - Construct habitat improvement passage projects and small irrigation screening projects including development and enhancement of model watersheds. The design and construction is expected to continue.
 - Continue implementation of high priority Endangered Species Act related projects, and activities associated with the USFWS BO and the NMFS BO.
 - Continue acquisition and installation of Adult Pit tag monitors at selected Federal dams in Snake and lower Columbia rivers. The design and construction is expected to continue.

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
Conservation and Energy Efficiency	0	26,000	42,200

The Conservation Augmentation (ConAug) program offers several ways for customers to participate in regional conservation. ConAug program components include: (1) request for Interest in Reducing Load Through Conservation (IRLC), which will result in customer proposals to conserve energy through residential weatherization, commercial lighting and HVAC, industrial processes and lighting, and irrigated agriculture; (2) residential compact fluorescent lighting; (3) "Vending Mi\$er", a program to reduce energy use in regional refrigerated vending machines; (4) Federal "Quick Start," a program to help Federal installations in the region reduce energy use; and (5) several other initiatives still in the design stage.

The Energy Web, a program advancing innovation and deployment of new energy technologies, will: (1) provide benefit to the Pacific Northwest; (2) promote standards and technology development deployment to achieve business benefits for BPA and its customers; and (3) promote the "Green" aspects of the Energy Web. Implications of participation in Energy Web development include:

- Diversification of BPA risk hedges to include physical alternatives such as demand reductions and peak generation.
- Demonstration of potential to reduce peak loads and transmission needs.
- Clarification of location benefits associated with peak load reduction, power and system reliability, power quality, and avoiding greenhouse gas production.
- Participating in an EPRI initiative, which will leverage BPA funding by promoting additional program development.

Total Power Business Line – Capital	81,800	165,700	197,500
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Explanation of Funding Changes From FY 2002 to FY 2003

	FY 2003 vs. FY 2002 (\$000)
Associated Project Costs	
■ Increase due to continuing power system reliability improvements.	+12,000
Fish and Wildlife	
■ Increase due to implementation of additional requirements in the most recent BO's and revised Council Program	+3,600
Conservation and Energy Efficiency	
■ Increase reflects promotion of energy conservation in lieu of generating resource purchases	+16,200
Total Funding Change, Power Business Line - Capital	<u>+31,800</u>

Transmission Business Line - Capital

Mission Supporting Goals and Objectives

The Transmission Business Line (TBL) provides for all additions, upgrades, and replacements to the Federal transmission system in the Pacific Northwest, allowing reliable service to be provided to Northwest industrial users and utility customers. The transmission system also allows for the sale and exchange of power to and from the region.

TBL plans to make significant improvements and additions to the system over the next five years to assure reliable transmission in the Northwest. These improvements and additions will help the Federal transmission system remain in compliance with national reliability standards, allow for interconnection of needed new generation, remove constraints that limit economic trade, remove constraints that limit the ability to maintain the system, and replace aging equipment. No major transmission projects have been built since 1987. Only incremental additions have been built into the system over the years, but it is stretched to the limit. Approximately 30,000 MW of generation are under consideration for siting in the Northwest. The Transmission System will become even more stressed with the addition of generation if nothing is done to reinforce the existing network. The map on the following page shows the constrained paths in the Northwest region.

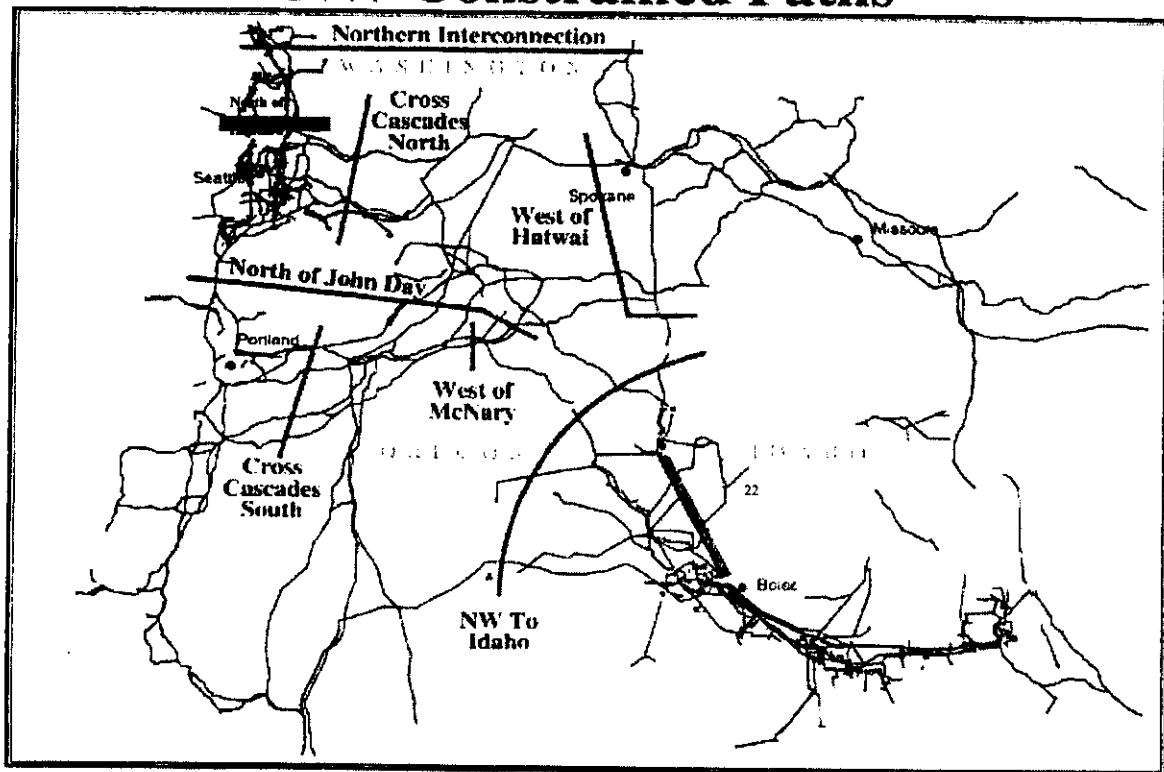
The first phase of Bonneville's infrastructure addition consists of the following major projects:

(1) Puget Sound Area Additions; (2) North of Hanford/North of John Day; (3) West of McNary; (4) Starbuck Generation; (5) Lower Monumental & McNary Area Generation (Phase II); (6) Cross Cascades North; (7) Celilo Modernization; (8) I-5 Corridor Generation Additions; (9) Spokane Area and Western Montana Generation Additions. These projects are further described below.

Bonneville assumes that some generators will integrate their load into the Federal system. Depending on which generators build on sites in the Northwest and the project locations: between 8000 to 12000 MW can be integrated with the completion of the above additions and improvements. The benefits will include relief from congestion, as well as restoring reliability margin back in the grid. This additional margin will be used to respond to a competitive market, meet regional load during outages, move power to meet changing loads, perform maintenance without harming the market, and allow the RTO to start without the regional grid heavily congested.

The system replacement plan is to replace high-risk, obsolete, and maintenance-intensive facilities and equipment and to reduce the chance of equipment failure by: 1) replacing high voltage transformers and power circuit breakers which are at or near the end of their useful life; 2) replacing risky, outdated and obsolete control and communications equipment; and 3) replacing all other existing high-risk equipment and facilities affecting the safety and reliability of the transmission system.

NW Constrained Paths



Bonneville will continue to fund fiber optic communications facilities needed to meet Bonneville's projected operational needs. To the extent that these investments create temporary periods of excess fiber optic capacity, such capacity can be made available to telecommunications providers and to non-profits to meet rural and other needs in Bonneville's service area. Bonneville's investments in fiber optics, including the role of the private sector in building fiber optic networks, is consistent with the "Fiber Optic Cable Plan" submitted to Congress on May 24, 2000, accompanying the FY 2000 Energy and Water Development Appropriations Act. In accordance with this plan, when possible, Bonneville will seek partnerships with fiber optic facility and service providers to meet its needs.

Funding Schedule (Accrued Expenditures)

(dollars in thousands)					
	FY 2001	FY 2002	FY 2003	\$ Change	% Change
Main Grid	16,600	133,700	299,700	+166,000	124.2%
Area & Customer Services	11,600	33,700	6,700	-27,000	-80.1%
Upgrades & Additions	91,800	49,700	26,400	-23,300	-46.9%
System Replacements	62,700	82,900	72,700	-10,200	-12.3%
Projects Funded in Advance	17,800	25,000	25,000	0	0.00%
Total, Trans Business Line - Capital	200,500	325,000	430,500	+105,500	32.5%

Detailed Program Justification

(dollars in thousands)			
	FY 2001	FY 2002	FY 2003
Main Grid	16,600	133,700	299,700

Strategic objectives: Bonneville's strategic objectives for main grid projects are to provide: voltage support; provide a reliable transmission system for open access per FERC criteria; provide for relief of transmission system congestion; and to assure compliance with NERC, Western Systems Coordinating Council (WSCC) and BPA reliability standards. During this budgeting period, projects are planned that will provide voltage support to major load areas that are primarily west of the Cascade mountains, and to provide for transmission access for new generation projects to the load center. Minor reinforcements in the Portland, OR/Seattle, WA corridor are also planned.

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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- FY 2001: (1) Completed planning studies and beginning of design and material acquisition for the Schultz 500kV series capacitors; (2) Completed the design for the Raver-Paul 500kV outage relief via RAS modifications; (3) Completed planning and began design for a new line from McNary to John Day Substations in lieu of the proposed tap line from McNary to the Ashe-Marion 500kV line, that is required to provide firm transmission service to new generators near McNary and Lower Monumental area; (4) Completed planning studies for the West of Hatwai transmission problems resulting in a proposed new Bell-Grand Coulee 500kV line; (5) Continued planning studies to correct the PNW-Idaho transmission capacity problems, including negotiations with Pacific Corp. and Idaho Power; (6) Completed the first phase of planning studies to comply with the N-2 outage criteria; (7) Continued required studies for the Northern Intertie and Puget Sound load growth, resulting in a new 500/230kV transformer addition at SnoKing Substation and a proposed second Echo Lake-Monroe 500kV line to enable BPA to meet the Canadian Treaty obligation and serve load in the Puget Sound Area; (8) Completed studies and began design for a new Schultz-Blackrock area 500kV line in lieu of the proposed Hanford-Schultz 500kV line, to eliminate transmission capacity problems north of Hanford; (9) Completed studies for the retermination of the Raver end of the Schultz-Raver 500kV line into Echo Lake, which requires 9 miles of a new 500kV line to improve the load serving capability into the Puget Sound area; (10) Awarded turnkey contract for the Celilo mercury arc valve replacement; (11) Completed studies for the integration of new generation in the north of McNary area, resulting in proposed new 500kV lines between Starbuck and Lower Monumental Substations and between Wallula and McNary Substations per open access policies; (12) Continued planning studies to identify other system reactive needs to mitigate unacceptable low or high voltage problems and other system additions.

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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- FY 2002: (1) Complete design of the Kangley-Echo Lake 500 KV line and substation addition at Echo Lake and the 500/230 KV bank addition at SnoKing substation; (2) Begin design of the Schultz-Wautoma 500 KV line; (3) Begin design of the new 500 KV Wautoma substation; (4) Complete environmental studies and begin design of the McNary-John Day 500 KV line and substation additions at John Day and McNary; (5) Begin design of the Lower Monumental-Starbuck 500 KV line and substation addition at Lower Monumental; (6) Begin design of the McNary-Smiths Harbor 500 KV line and the 500 KV shunt capacitor additions at McNary, Big Eddy, and Slatt substations; (7) Begin replacement of converter valves at Celilo; (8) Begin design of the Grand Coulee-Bell 500 KV line, the 500 KV series capacitor additions at Bell and Dworshak substations, 500 KV series capacitor replacement at Garrison substation, and the 500 KV shunt reactor addition at Grand Coulee; (9) Begin installation of the 500/230 KV bank addition at Pearl substation; (10) Begin design of the Libby-Bonners Ferry 230 KV line addition; (11) Begin design of the Hanford-Ostrander 500 KV loop to Big Eddy substation; (12) Complete cooling plant construction at Celilo for valve groups 1-6; (13) Begin installation of new converter valves at Celilo; (14) Award Furnish and Install (F & I) contract for the infrastructure line projects; (15) Continue planning studies and design to comply with the N-2 outage criteria; (16) Continue planning studies to identify other system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (17) Continue planning studies to identify system to improve infrastructure additions.
- FY 2003: (1) Begin construction of the Kangley-Echo Lake 500 KV line and substation addition at Echo Lake and the 500/230 KV bank addition at SnoKing substation; (2) Complete design of the Schultz-Wautoma 500 KV line; (3) Complete design and begin construction of the 500 KV Wautoma substation; (4) Complete design of the McNary-John Day 500 KV line and substation additions at John Day and McNary; (5) Complete design of the Lower Monumental-Starbuck 500 KV line and substation addition at Lower Monumental; (6) Complete design of the McNary-Smiths Harbor 500 KV line and 500 KV shunt capacitor additions at McNary, Big Eddy and Slatt substations; (7) Complete installation of the 500 KV series capacitor addition at Schultz substation; (8) Continue replacement of converter valves at Celilo; (9) Complete design of the Grand Coulee-Bell 500 KV line, 500 KV series capacitor additions at Bell and Dworshak substations, 500 KV series capacitor replacement at Garrison substation and the 500 KV shunt reactor addition at Grand Coulee; (10) Complete installation of the 500/230 KV bank addition at Pearl substation; (11) Complete design and begin construction of the Libby-Bonners Ferry 230 KV line addition; (12) Complete design and begin construction of the Hanford-Ostrander 500 KV loop to Big Eddy substation; (13) Complete design and begin construction of the Olympia-Satsop 500 KV line interchange to Shelton 500 KV line; (14) Begin preliminary engineering design of the Paul-Troutdale 500 KV line addition; (15) Continue planning studies for the integration of new generation facilities; (16) Continue planning studies to identify the system additions to solve the transmission system capacity congestion; (17) Continue planning studies and design to comply with the N-2 outage criteria; (18) Continue planning studies to identify other system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (19) Continue planning studies to identify infrastructure additions.

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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Area & Customer Services 11,600 33,700 6,700

Area and Customer service projects assure that Bonneville meets the reliability standards and the contractual obligations we have to our customers for serving load growth.

- FY 2001: (1) Continued design, material acquisition and began construction to replace the cable and upgrade support and maintain reliability for the San Juan area in NW Washington; (2) Continued design, material acquisition and began construction on the Shelton-Kitsap line rebuild to double circuit to provide voltage stability and prevent transformer and line overloads in the Kitsap area; (3) Continued studying the needs for reinforcements for the Southwestern Oregon Coast Project to maintain reliability in the Southwest Oregon Area; (4) Discontinued design and construction of the Custer-Intalco contractual obligations and provide reliability to the Snohomish, Washington area; (5) Continued preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for the BPA service area.
- FY 2002: (1) Complete design, material acquisition and begin construction on the Shelton Kitsap line rebuild to double circuit to provide voltage stability and prevent transformer and line overloads in the Kitsap area; (2) Complete design, material acquisition and construction to replace the cable and upgrade support and maintain reliability for the San Juan area in NW Washington; (3) Continue studying the need for reinforcements for the Southwestern Oregon Coast Project to maintain reliability in the Southwest Oregon Area; (4) Continue preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for the BPA service area.
- FY 2003: (1) Continue design and begin material acquisition and construction for reinforcements for the Southwestern Oregon Coast Project to maintain reliability in the Southwest Oregon Area; (2) Continue preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for the BPA service area.

Upgrades and Additions	91,800	49,700	26,400
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Replacing older communications and controls with newer technology including fiber optics in order to maintain or enhance the capabilities of the transmission system. During this budget period, BPA will complete design, material acquisition, construction and activation of several fiber optics facilities to provide bandwidth capacity and high-speed data transfers to eventually replace microwave analog radios, which are becoming technologically obsolete and nearing the end of their useful life. Temporarily, in some areas excess fiber capacity is being offered for a term to telecommunications providers and public entities such as public utilities, schools, libraries, and hospitals providing them access to high-speed telecommunication services as a public benefit.

- FY 2001: (1) Continue completion of the Noxon to Kalispell section of the Noxon-Hot Springs 200 mile fiber optic project. This is part of the communications upgrade in Western Montana to replace aging analog radio systems and enhance control and communications to improve system reliability; (2) Completed the installation of fiber optic terminal equipment and switching of operational circuits onto the fiber at various BPA substations; (3) Completed design and material acquisition of fiber optic projects as a continuation of the overall upgrade to the operational telecommunication system; (4) Completed design, material acquisition and construction of microwave, digital radio system upgrades that are critical for the overall upgrade to the operational telecommunication system; (5) Completed additional efforts to separate Transmission from the Power scheduling function; (6) Continued planning, design, material acquisition, and construction of various system additions and upgrades necessary to maintain a reliable system for the BPA service area.

- FY 2002: (1) Complete design, material acquisition, and construction of 35 miles of fiber optic cable from Flathead Substation to Libby Substation and Libby Powerhouse; (2) Complete construction of the Kalispell to Hot Springs section of the Noxon-Hot Springs 200 mile fiber optic project; (3) Design, material acquisition and construction of 10 miles of fiber optic cable and terminations between Longview and Allston. This is part of the long range plans to implement reliable digital communications on the 500 kV main grid which also allows for more efficient interconnection of any new generation projects; (4) Continued design, material acquisition and construction of 37 miles of fiber optic cable and terminations between Custer and Intalco. This is part of the overall replacement of analog communications and which will become part of the Northern Intertie fiber loop that will provide reliable communications between western Canada and the US; (5) Continued design, material acquisition and construction of 97 miles of fiber optic cable and terminations between Bell and Taft. This is part of the overall upgrade of the backbone analog communications on the main grid. (6) Continue the installation of fiber optic terminal equipment and switching of operational circuits onto the fiber at BPA substations; (7) The 12 mile fiber optic cable between Raver and Echo Lake was re-scheduled into 2 phases. In FY 2002 Phase 1 of the design and material acquisition will continue; (8) Complete design, material acquisition, and construction of fiber optics projects to continue the improvement of the operational telecommunication system; (9) Complete design, material acquisition and construction of critical microwave, digital radio system with particular emphasis on the Montana area; (10) Complete additional efforts to separate Transmission from the Power Scheduling functions at the Dittmer and Munro Control Center; (11) Continue planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for the BPA service area.
- FY 2003: (1) Complete material acquisition and construction of the 12 mile fiber optic cable on the Raver-Echo Lake 500 kV line, Phase 2 of this project; (2) As part of the overall effort to upgrade the analog system and provide a more reliable backbone communication system – design, acquire material and construct 33 miles of fiber optic cable and terminations from Covington to Maple Valley to Echo lake, 45 miles from Echo lake to Monroe to Snohomish, 68 miles from Snohomish to Bellingham, 8 miles from Bellingham to BC Hydro's system, 112 miles from Alvey to Marion to Pearl and 45 miles from Pearl to Ostrander to Troutdale. The connections from Covington to BC Hydro's system is what was referred to as the Covington to Blaine project that was previously deferred; (3) Continue design, material acquisition and construction of fiber projects and digital radio system upgrades to improve the operational telecommunication system and to meet rural needs; (4) Continue efforts to replace and upgrade operational and business tools at the control centers; (5) Continue planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for the BPA service area.

System Replacements	62,700	82,900	72,700
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Non-Electric Replacements:

- FY 2001: (1) Completed various maintenance building and control house roof replacements; (2) Completed seismic upgrades to buildings; (3) Completed various High Voltage Alternating Current (HVAC) replacements; (4) Completed various necessary non-electrical replacements based on RCR implementation; (5) Completed other non-electric replacements as required.

FY 2002: (1) Complete various maintenance building and control house roof replacements; (2) Complete seismic upgrades to buildings; (3) Complete various HVAC replacements; (4) Complete other non-electric replacements as necessary; (5) Begin design activities, material acquisition, and construction for the new Access Road Program, a prioritized effort to upgrade aging access roads to critical transmission lines; (6) Begin preliminary design and complete requirements for the Dittmer Control Center expansion at the Ross Complex.

FY 2003: (1) Complete various maintenance building and control house roof replacements; (2) Complete seismic upgrades to buildings; (3) Complete various HVAC replacements; (4) Complete other non-electric replacements as necessary; (5) Continue the design, material acquisition, and construction for the Access Road Program; (6) Complete design and site preparation for the Dittmer Control Center expansion at the Ross Complex.

Electric Replacements:

All electrical replacements were accomplished to maintain a reliable electrical system at the least cost by strategically replacing critical items.

- FY 2001: (1) Completed design, material acquisition, and construction of PCB-contaminated capacitor replacement at various locations; (2) Completed design, material acquisition, and construction of system protection and control equipment replacements and replacement of other substation and line facilities as needed to maintain reliability using RCR criteria. Such replacements include relays, annunciators, oscillographs, various types of communication related equipment and Supervisory Control And Data Acquisition (SCADA) equipment; (3) Replaced critical, operational tools and systems at the Dittmer and Munro Control Centers; (4) Continued replacing deteriorating wood pole transmission line structures.

- FY 2002: (1) Complete design, material acquisition, and construction of PCB-contaminated capacitor replacement at various locations; (2) Continue design, material acquisition, and construction of system protection and control equipment replacements, and replacement of other substation and line facilities as needed to maintain reliability using RCR criteria. Such replacements include relays, annunciators, oscillographs, various types of communication related equipment and SCADA equipment; 3) Start design and material acquisition of the replacement of aging control systems at the Celilo Converter Station necessary to continue operation of 3100 MW of DC transmission capability; (4) Continue replacing critical, operational tools and systems at the Dittmer and Munro Control Centers; (5) Continue replacing deteriorating wood pole transmission line structures.
- FY 2003: (1) Continue design, material acquisition, and construction of system protection and control equipment replacements and replacement of other substation and line facilities as needed to maintain reliability using RCR criteria. Such replacements include relays, annunciators, oscillographs, various types of communication related equipment and SCADA equipment; (2) Continue design and start construction of the replacement of aging control systems at the Celilo Converter Station necessary to continue operation of 3100 MW of DC transmission capability ; (3) Continue replacing critical, operational tools and systems at the Dittmer and Munro Control Centers; (4) Continue replacing deteriorating wood pole transmission line structures.

Projects Funded in Advance	17,800	25,000	25,000
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This category includes those facilities and/or equipment where BPA retains ownership but which are funded by another entity, either in total or in part through a cost-share agreement.

- FY 2001: (1) Completed design, material acquisition and construction of Teton Area Reinforcement facility needed to prevent low voltages in the Teton, Idaho and Jackson, Wyoming area; (2) Completed the design, material acquisition and construction of 70 miles of fiber optic cable from Keeler Substation to Tillamook Substation on the Northern Oregon coast; (3) Completed the integration of new 265 MW generation capacity at Rathdrum into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (4) Continued the integration of new 280MW generation capacity in Boardman, OR into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (5) Continued the integration of new 536MW generation capacity near Hermiston into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (6) Continued integration of new 270 MW generation capacity near Tacoma into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (7) Continued integration of new 248 MW and 225 MW generation capacities near Goldendale into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (8) Continued integration of new 600MW generation capacity near Chehalis into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (9) Conducted preliminary work to integrate the new 1200 MW generation capacity near Starbuck into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (10) Conducted preliminary work to integrate the new 1300 MW generation capacity near Wallula into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (11) Performed studies to identify system impacts and needs regarding proposed new generation projects; (12) Performed environmental cleanup and other work necessary for the sale of BPA facilities; (13) Completed other projects as requested by customers.

- FY 2002: (1) Complete the integration of new 280 MW generation capacity in Boardman, OR into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (2) Complete the integration of new 536MW generation capacity near Hermiston into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (3) Complete the integration of new 270 MW generation capacity near Tacoma into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (4) Complete the integration of new 248 and 225 MW generation capacities near Goldendale into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (5) Continue the integration of new 600MW generation capacity near Chehalis into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (6) Integrate new 1200 MW generation capacity near Starbuck into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (7) Integrate new 1300 MW generation capacity near Wallula into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (8) Perform studies to identify system impacts and needs regarding proposed new generation projects; (9) Perform environmental cleanup and other work necessary for the sale of BPA facilities; (10) Complete other projects as requested by customers.
- FY 2003: (1) Complete the integration of new 600MW generation capacity near Chehalis into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (2) Continue the integration of new 1200 MW generation capacity near Starbuck into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (3) Continue the integration of new 1300 MW generation capacity near Wallula into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (4) Perform studies to identify system impacts and needs regarding proposed new generation projects; (5) Perform environmental cleanup and other work necessary for the sale of BPA facilities; (6) Complete other projects as requested by customers.

Total, Transmission Business Line – Capital	<u>200,500</u>	<u>325,000</u>	<u>430,500</u>
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Explanation of Funding Changes From FY 2002 to FY 2003

FY 2003 vs. FY 2002 (\$000)

Main Grid

- Reflects increased materials and construction costs to make significant improvements and additions to the transmission system. +166,000

Area & Customer Services

- Reflects less emphasis on customer service projects as strategic focus has changed to improvements and additions to the Main Grid facilities -27,000

Upgrades & Additions

- Reflects less emphasis on communications upgrades system-wide as the strategic focus has changed to improvements and additions to the Main Grid facilities. Communications related to the new facilities is included in the Main Grid projects -23,300

System Replacements

- Reflects less emphasis on system replacements, except for the Celilo project, as the strategic focus has changed to improvements and additions to the Main Grid facilities -10,200

Projects Funded in Advance

- No change +0

Total Funding Change, Transmission Business Line - Capital	+105,500
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Capital Equipment/Capitalized Bond Premium

Mission Supporting Goals and Objectives

This activity provides for the acquisition of general and dedicated special purpose capital automatic data processing (ADP) equipment, development of capitalized ADP software, and acquisition of special-use capital furniture and equipment in support of BPA's strategic objectives. This budget category provides the BPA business lines with the ability to acquire general and dedicated special purpose capital ADP equipment. This activity also provides the ability for developing capitalized ADP software, and acquiring special-use capital furniture and equipment for BPA to meet its strategic business objectives.

Bonneville incurs a bond premium whenever it repays a bond before the due date. When bonds are refinanced, the bond premiums incurred are capitalized. Historically, BPA generally has chosen to finance capitalized bond premiums with bonds issued to the U.S. Treasury, as was envisioned in the Federal Columbia River Transmission System Act of 1974.

Funding Schedule (Accrued Expenditures)

(dollars in thousands)					
	FY 2001	FY 2002	FY 2003	\$ Change	% Change
Capital Equipment	17,500	26,300	24,800	-1,500	-5.7%
Capitalized Bond Premium	0	2,200	3,000	+800	36.4%
Total, Capital Equipment/Capitalized Bond Premium	17,500	28,500	27,800	-700	-2.5%

Detailed Program Justification

(dollars in thousands)			
	FY 2001	FY 2002	FY 2003
Capital Equipment	17,500	26,300	24,800
..			

- Acquire capital office furniture and equipment, capital ADP-based administrative telecommunications equipment, ADP equipment (hardware), and support capital software development for all BPA programs. Includes enhancements to BPA's Enterprise systems, designed to link key information systems throughout Bonneville and improve business processes. Current efforts include functional expansion into areas not implemented during the initial development phase.

Capitalized Bond Premium	0	2,200	3,000
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- Continue to assess financial market and when cost-effective, refinance available bonds as prudent.

Total, Capital Equipment/Capitalized Bond Premium .	<u>17,500</u>	<u>28,500</u>	<u>27,800</u>
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Explanation of Funding Changes From FY 2002 to FY 2003

FY 2003 vs. FY 2002 (\$000)

Capital Equipment

- Decrease due to implementation of Business Solutions Project -1,500

Capitalized Bond Premium

- Increase in anticipated bond refinancing due to evolving refinancing opportunities +800

Total, Funding Change Capital Equipment/Capital Bond Premium	<u>-700</u>
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Power Business Line - Operating Expense

Mission Supporting Goals and Objectives

Production includes all BPA strategic resource planning and business development, short and long-term power purchases, wheeling, electric utility marketing of resources, hedging-related costs, generation and oversight costs, including the large thermal nuclear projects. These activities identify the Administrator's load obligations, develop product plans and services to meet the needs of BPA customers, and acquire resources as needed. As a means of mitigating power market risk, BPA's Hedging Policy allows the use of financial instruments in the power, natural gas, and aluminum markets to hedge the price of electricity and reduce BPA's exposure to market fluctuations and certain index sales contract provisions.

Associated Projects provide funding for operation and maintenance costs for the FCRPS; minor additions, improvements, and replacements; and liabilities of the Corps of Engineers and Bureau of Reclamation hydroelectric projects in the Pacific Northwest, which serve many purposes. Both agencies are emphasizing efficient power production from existing facilities and improvement of the performance and availability of power units. BPA pays additional financing costs of the FCRPS facilities through its Interest Expense and Capital Transfer budget programs. BPA is responsible for the actual operations and maintenance expenditures incurred as part of the Lower Snake River Compensation Plan (LSRCP) hatcheries. Bonneville is responsible for annual payments to the Confederated Tribes of the Colville Reservation for their claims concerning their contribution to the production of hydropower by the Grand Coulee Dam in accordance with the Settlement Agreement between the United States and the Tribes (April 1994). Beginning in FY 2001, as part of Reclamation operation and maintenance costs, Bonneville is responsible for the power portion of the Green Springs Powerplant operations and maintenance costs.

Fish and Wildlife expenses provide for the protection, enhancement and mitigation of Columbia River Basin fish and wildlife due to losses attributed to the development and operation of hydroelectric projects on the Columbia River and its tributaries. BPA discharges a major portion of its fish and wildlife responsibilities pursuant to Section 4(h) of the Northwest Power Act by funding projects and activities designed to be consistent with the Planning Council's Fish and Wildlife Program. To satisfy its responsibilities under the Endangered Species Act, BPA implements measures in the biological opinions issued by the NMFS and the USFWS regarding the operations of the Federal Columbia River hydro system.

Fish and Wildlife program estimates reflect, and are consistent with, the fish and wildlife principles that originally were identified in the 1996 Fish Budget MOA.

NMFS and USFWS issued new Biological Opinions (Bos) on FCRPS operations in December 2000. The BO's require the Action Agencies (COE, BOR, and BPA) to implement actions throughout the Columbia River Basin that comprehensively address all the life stages of Endangered Species Act (ESA)-listed fish. BPA's responsibilities under the 2000 FCRPS BO's are expected to significantly escalate its Fish and Wildlife costs in future years. To plan for this expected increase, BPA incorporated a wide range of fish and wildlife costs for rate-setting purposes. Based on the 2000 FCRPS BO requirements, BPA expects to annually obligate an average of \$150 million for fish and wildlife for the rate case covering FY 2002 - 2006. This is within the range assumed in the

power rate case, which assumed an annual average of \$139 million, based on a range of \$109 - \$179 million of accrued expenses.

BPA's fish and wildlife expense funds will focus on activities that benefit Columbia River Basin fish and wildlife resources including projects designed to:

- increase survival of ESA-listed fish at FCRPS dams and reservoirs;
- increase survival of ESA-listed fish throughout their life cycle by protecting and enhancing important habitat areas;
- reform hatchery practices and use hatcheries to contribute to conservation and recovery of ESA-listed fish;
- reduce harvest-related mortality on ESA-listed fish and support sustainable fisheries; and,
- support a disciplined and well-coordinated research, monitoring, and evaluation program.

BPA is working to integrate the actions implemented in response to the 2000 FCRPS BO's with projects implemented under the Council's Fish and Wildlife Program. In the near term, BPA will use the Council's Provincial Review process as the primary vehicle for soliciting project proposals to address BO actions. Provincial Review project solicitations will identify specific BO implementation needs in conjunction with the broader non-ESA Northwest Power Act priorities. BPA also may use targeted solicitations if BO requirements are not fully satisfied through the Provincial Review's solicitations.

The FY 1997 Energy and Water Development Appropriations Bill added section 4(h)(10)(D) to the Northwest Power Act, directing the Planning Council to appoint a Scientific Review Panel "to review projects proposed to be funded through that portion of Bonneville Power Administration's fish and wildlife budget that implements the Planning Council's fish and wildlife program." And, "... in making its recommendations to BPA, the Planning Council shall consider the impact of ocean conditions on fish and wildlife populations; and shall determine whether the projects employ cost effective measures to achieve program objectives." Consequently, projects funded under Bonneville's direct program will be reviewed and prioritized as part of the Planning Council initiative process.

The Northwest Power Act created the Residential Exchange Program (REP) to extend the benefits of low-cost Federal power to Pacific Northwest electric utilities serving the residential and small farm customers of the Pacific Northwest. The 1996 Comprehensive Regional Review recommended that BPA engage in settlement discussions regarding Residential Exchange. BPA developed a Subscription Strategy based on the recommendations of the Comprehensive Review. That strategy proposed a comprehensive settlement of the REP for Investor-Owned Utilities (IOU) in the Pacific Northwest which has resulted in new contracts with regional IOUs that provide power and monetary benefits to their residential and small farm customers.

To settle the REP with the Investor-Owned Utilities, IOU customers were offered 1900 aMW in power and monetary benefits. The power was sold at a price equivalent to the priority firm power rate. The monetary benefits are calculated based on a forecast of the cost of purchasing the power in the market less the price used for sale of power to the IOU customers. All 6 regional IOUs signed contracts in the fall of 2000 implementing this settlement of the Residential Exchange. They originally were to receive 1000 aMW of power and 900 aMW in monetary benefits for FY 2002-2006, but the IOUs subsequently converted 619 aMW of power to monetary benefits. In FY 2007 the total amount of settlement benefits changes to 2200 aMW. Under the Subscription

strategy, BPA stated its intent for all of these benefit to be provided as power; however, BPA may provide either power or monetary benefits under the terms of the settlement agreements.

BPA's preference utilities, or public agency utilities, are eligible to execute new Residential Exchange Program contracts beginning in 2001, except for the nine utilities that previously executed settlement agreements for terms ending July 1, 2011. These customers are forecasted to have average system costs that are lower than the Exchange Program rate and thus would not qualify for these benefits.

The Northwest Power Act directs that expenses of the Planning Council, subject to certain limits based on forecasted BPA power sales, shall be included in BPA's annual budget to Congress. Funding for the Planning Council is provided by Bonneville and is recovered through Bonneville rates. Its major activities include the periodic preparation of a Northwest Conservation and Electric Power Plan (a 20-year electric energy demand and resources forecast and energy conservation program) and a Columbia River Basin Fish and Wildlife Program of loss mitigation and resource enhancement actions.

The competitive market situation is driving the need for alternatives to the traditional approaches to developing conservation resources. PBL will acquire conservation in accordance with the Northwest Power Planning Council's guidance and act as a catalyst for energy efficiency and direct application renewables. The resources will provide a vital component of PBL's diversified resource portfolio: (1) meet conservation targets; (2) achieve a least cost resource mix; (3) dampen the cost impacts of power purchases; (4) avoid the costs of ramping programs and infrastructure up and down; (5) extend the value of the FCRPS to customers; (6) cushion the need for rate increases; and (7) build the region's resource portfolio with conservation and direct application renewables.

Funding Schedule (Accrued Expenditures)

	(dollars in thousands)				
	FY 2001	FY 2002	FY 2003	\$ Change	% Change
Production	2,980,900	1,875,900	1,685,300	-190,600	-10.2%
Associated Projects Costs.	195,400	209,800	223,700	+13,900	6.6%
Fish & Wildlife.	102,800	150,000	150,000	0	0%
Residential Exchange	68,100	143,800	143,800	0	0%
Planning Council	7,300	8,300	8,300	0	0%
Conservation and Energy Efficiency	30,900	35,400	34,900	-500	-1.4%
Total, Power Services - Operating Expense	3,385,400	2,423,200	2,246,000	-177,200	-7.3%

Detailed Program Justification

(dollars in thousands)		
FY 2001	FY 2002	FY 2003

Production	2,980,900	1,875,900	1,685,300
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Short-Term Power Purchases/Pacific Northwest Coordination Agreement (PNCA) Interchange: Includes purchase power for efficient operation of the power system, fish mitigation and resale. Due to higher and more volatile market prices in 2001, Bonneville was subject to much greater demand for service from its customers. This increase in load demand over the rate period indicates that Bonneville may need to make substantially greater power purchases in the market. In order to mitigate a larger rate increase, FY 2002 and FY 2003 expenses include \$484 million, and \$341 million respectively, in IOU and DSI load buy downs. See additional discussion of the evolving power market included in "Significant Accomplishments and Program Shifts" included in the Program Mission section of this budget.

Under terms of the PNCA, BPA makes interim cash payments to other generating utilities for power received as interchange energy. Likewise, BPA receives interim cash payments from other generating utilities for power that BPA delivers as interchange energy. Interchange energy is an energy exchange between utilities to supply all or a part of any deficiency between a utility's actual energy capability and its firm energy load carrying capability. The energy is then returned to the supplying utility at a time that it has a deficiency.

- **Power Scheduling/Marketing:** Schedule and market (buy/sell) electric energy with BPA customers and the Pacific Northwest's interconnected utilities. Scheduling includes PBL's implementation of physical and memo power schedules and associated transmission schedules, implementation of Electronic Tagging (ETag) in accordance with NERC, and in accordance with FERC, implementation of electronic scheduling and the RTO as it evolves. PBL's acquisition of a new Transaction Scheduling System will facilitate the above needs. Place major emphasis on marketing for support of the Biological Opinion of the Fish and Wildlife Program.
- **Trojan:** Continue termination and decommissioning of BPA's 30 percent share of the Trojan Nuclear Plant. Due to a delay in a major decommissioning project, activity at Trojan decreased for FY 2001 and should stay at a lower level through FY 2002. As work on the delayed project is restarted, activity should increase in FY 2003.
- **Columbia Generating Station (WNP-2):** Continue to acquire full capability of Columbia Generating Station (Columbia). Columbia has now completed the transition to a 24-month fuel cycle from a 12-month cycle. Changes are due to increased fuel costs associated with the transition and other major capital projects scheduled for out years. Outages occurred in FY 2001 and will occur in FY 2003.
- **WNP-1/WNP-3:** Continue to fulfill contractual obligations for WNP-1 and WNP-3.

(dollars in thousands)		
FY 2001	FY 2002	FY 2003

■ Long Term Power Purchases and Wheeling:

FY 2001 and FY 2002: Continue to acquire 100 percent of the Idaho Falls, Cowlitz Falls, Wauna and BPA's share of Foote Creek 1 project output. Continue contract payments on four billing credit projects. Continue to acquire 100 percent of the output of the Foote Creek 2 and 4 wind project and a 15-kW share of the output from the Solar Ashland Project.

FY 2003: Continue to acquire 100 percent of the Idaho Falls, Cowlitz Falls, Wauna and BPA's share of Foote Creeke 1 project output. Continue contract payments on four billing credit projects. Continue to acquire 100 percent of the output of the Foote Creek 2 and 4 wind projects and a 15-kW share of the output from the Solar Ashland Project. BPA decided to execute the contracts and acquire all of the output from the Condon and Stateline wind projects, and may acquire a portion of the output from the Maiden and Blackfeet wind projects. Make decisions whether to acquire output from seven additional wind projects.

■ Generation & Oversight:

FY 2001: Completed the NEPA process and issued a Record of Decision for the Condon Wind Project. Issued a Record of Decision for the Fourmile Hill Geothermal Project. Initiated additional renewable resource acquisitions.

FY 2001-2002: Continue to provide oversight of all contracts signed to date. Provide oversight of large thermal generating plants from which BPA purchases capability to insure that all BPA approval rights are protected; coordinate, communicate and administer agreements, issues and programs between BPA and the project owners. Make decision whether to purchase a share of output from the Stateline Wind Project. Initiate additional renewable resource acquisitions. Continue or initiate NEPA process for 10 new wind projects.

FY 2003: Continue to provide oversight of all contracts signed to date. Provide oversight of large thermal generating plants from which BPA purchases capability to insure that all BPA approval rights are protected; coordinate, communicate and administer agreements, issues and programs between BPA and the project owners. Complete NEPA process and make decisions whether to acquire wind projects initiated in FY 2001.

Associated Project Costs	195,400	209,800	223,700
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- Support FCRPS project costs and work to strengthen relationships to improve project support and better understand project costs. This helps to maintain FCRPS system integrity and to attain BPA's strategic business objectives.

(dollars in thousands)		
FY 2001	FY 2002	FY 2003

- Bureau of Reclamation:
 - FY 2001: Continue direct funding Bureau O&M power activities.
 - FY 2002: Continue direct funding Bureau O&M power activities.
 - FY 2003: Continue direct funding Bureau O&M power activities.
- Corps of Engineers:
 - FY 2001: Continue direct funding Corps O&M power activities.
 - FY 2002: Continue direct funding Corps O&M power activities.
 - FY 2003: Continue direct funding Corps O&M power activities.

Fish and Wildlife	102,800	150,000	150,000
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In a manner consistent with the assumptions used for the FY 2002-2006 power rate case:
 Anadromous Fish: Continue implementing projects which support Endangered Species Act listed species and other measures called for under the 2000 FCRPS NMFS BO. Use the Council's Provincial Review and Sub-basin Planning processes to identify activities for implementation. Implement and develop activities that protect and enhance tributary and estuary habitat, improve mainstem habitat on an experimental basis, reduce potentially harmful hatchery practices, and contribute to sustainable fisheries. These activities have been selected in response to the Northwest Power Act section 2(6) to "protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries."

Resident Fish: Implement activities to determine the impacts of the FCRPS on bull trout and mitigate for those impacts, and promote the reproduction and recruitment of Kootenai River white sturgeon. These activities have been selected in response to the U. S. Fish and Wildlife Service 2000 FCRPS BO and the Northwest Power Act to "protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries."

- Continue mitigation in resident fish for anadromous losses (substitution), mitigation for reservoir operation impacts to resident fish, and continue to refine, quantify, and delineate the difference between the two.
- Wildlife: Continue the current program including funding for wildlife actions resulting from Planning Council Fish and Wildlife Program amendments for wildlife mitigation. These activities have been selected in response to the Northwest Power Act to "protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries."

Residential Exchange	68,100	143,800	143,800
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- Includes negotiated contract settlement agreement costs consistent with assumptions in the power rate case and subscription strategy.

	(dollars in thousands)		
	FY 2001	FY 2002	FY 2003
Planning Council	7,300	8,300	8,300
Conservation and Energy Efficiency	30,900	35,400	34,900

- Close out the Legacy conservation resource acquisition contracts, which support BPA's contractual obligation to serve customer load growth. As part of the power subscription strategy and the 2002 Power Rate Case, BPA implemented a conservation rate credit system for utility customers.

Provide credible, unbiased information or technical or financial support to conservation purposes. As an agency of the DOE, and with independent responsibilities based on its authorizing legislation, BPA has a statutory responsibility to provide support to certain conservation objectives which are governmental in nature, such as assisting in the development of emerging technologies and providing unbiased information to consumers. BPA is participating with other regional entities to support market transformation and development activities that meet the needs of BPA customers and create business opportunities for the private sector in the Pacific Northwest.

- Seek to make the existing energy efficiency marketplace larger by helping to remove barriers which customers face in the development of conservation projects. This opens up possibilities that have previously been foreclosed, thus serving to "grow the pie." This activity must be self-financing; that is, payments from customers must cover all of the costs of performing the service.
- Create and enhance markets for energy efficiency and end-use renewables through delivery of public benefits. Promote the development and implementation of new energy efficiency technologies. Provide leadership and collaborative funding for market transformation initiatives. Continue activities being performed through the regionally-funded Northwest Energy Efficiency Alliance through a multi-party agreement signed in 2000.

Total, Power Business Line – Operating Expense . . .	<u>3,385,400</u>	<u>2,423,200</u>	<u>2,246,000</u>
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Explanation of Funding Changes from FY 2002 to FY 2003

	FY 2003 vs. FY 2002 (\$000)
Production	
■ Decrease in short-term power purchases due to expected lower market prices, especially as more generation comes on-line in the region.	-190,600
Associated Project Costs	
■ Increase due to improvements, replacements, and minor additions	13,900
Fish and Wildlife	
■ No change.	0
..	
Residential Exchange	
■ No change.	0
..	
Planning Council	
■ No change.	0
..	
Conservation and Energy Efficiency	
■ Minor decreased costs due to program funding requirements	-500
Total Funding Change, Power Business Line - Operating Expense	-177,200

Transmission Business Line - Operating Expense

Mission Supporting Goals and Objectives

This activity provides for the transmission system services of engineering, operations and maintenance for BPA's electric transmission system of 15,000 circuit miles (24,135 circuit kilometers) of lines, 324 substations, and associated power system control and communication facilities with an invested cost of more than \$4.8 billion. Primary strategies of this program are: 1) maintain the safety and reliability of the transmission system, consistent with the strategic performance goals ER 9-3 and ER 9-1; 2) increase the focus on customers; 3) optimize the transmission system; and 4) improve BPA's competitive position.

Funding Schedule (Accrued Expenditures)

	(dollars in thousands)				
	FY 2001	FY 2002	FY 2003	\$ Change	% Change
Engineering	20,100	38,000	36,800	-1,200	-3.2%
Operations	77,600	99,300	98,500	-800	-0.8%
Maintenance	117,900	158,200	155,300	-2,900	-1.8%
Total, Transmission Business Line - Operating Expense	215,600	295,500	290,600	-4,900	-1.7%

Detailed Program Justification

	(dollars in thousands)		
	FY 2001	FY 2002	FY 2003
Engineering	20,100	38,000	36,800

Continue efforts to identify best methods for improving system reliability and maintenance practices, and continue cost reduction efforts by identifying opportunities for low cost reinforcement and voltage support of the existing transmission system.

- R&D: Conduct in-house transmission system research and development, including (1) studies on reliability, HVDC (high voltage direct current) and HVAC (high voltage alternating current) outage reduction, (2) methods to update existing facilities and reduce maintenance costs including reliability-centered monitoring and recording methods for analysis.

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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- **Technical Support:** Provide technical support activities, such as transmission system planning and studies to optimize portions of the system.
- **Capital-to-Expense Adjustments:** Annually, BPA analyzes its outstanding capital work orders to assess whether they should be expensed.
- **Reimbursable Transactions:** BPA enters into written agreements with Federal and non-Federal entities that have work or services to be performed by BPA staff at the expense of the benefiting utilities. The projects must be beneficial, under agreed upon criteria, to BPA operations and to the Federal or non-Federal entity involved. Additionally, these activities contribute to more efficient or reliable construction of the Federal transmission system or otherwise enhance electric service to the region.
- **Leased Facilities:** When operationally feasible, BPA leases delivery facilities and voltage support facilities to support the transmission system instead of building or purchasing new assets.

Operations	77,600	99,300	98,500
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- **FY 2001:** Continued to operate within parameters of regional transmission authorities. Prepared for increased complexity of outage scheduling, transmission scheduling, and dispatching as well as impact of an expected high attrition rate of skilled operation dispatching workforce by recruiting and training apprentices and skilled replacements. Continued development and implementation of business systems and tools. Participated in planning and preparation for potential establishment of an RTO.
- **FY 2002:** Continue to operate within parameters of regional transmission authorities. Continue preparation for increased complexity of outage scheduling, transmission scheduling, and dispatching as well as impact of an expected high attrition rate of skilled operation dispatching workforce by recruiting and training apprentices and skilled replacements. Continue development and implementation of business systems and tools. Participate in planning and preparation for potential establishment of an RTO.
- **FY 2003:** Continue to operate within parameters of regional transmission authorities. Continue preparation for increased complexity of outage scheduling, transmission scheduling, and dispatching as well as impact of an expected high attrition rate of skilled operation dispatching workforce by recruiting and training apprentices and skilled replacements. Continue development and implementation of business systems and tools. Participate in planning and preparation for potential establishment of an RTO.

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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- **Substation Operations:** Perform operations functions necessary to provide electric service to customers and to protect the Federal investment in electric equipment. Includes equipment adjustments, switching lines and equipment during emergencies or maintenance, isolating damaged equipment, restoring service to customers, and inspecting equipment, reading meters, et cetera.
- **Power System Control & Dispatching:** Includes central dispatching, control, and monitoring of the electric operation of the Federal transmission system. Also includes load, frequency, and voltage control of Federal generating plants, and operation of the system control and data computers at Dittmer and Munro Control Centers.
- **Operations Standards & Engineering:** Includes analyzing system loads, voltage levels, outage information, stability levels and other data, and making policy recommendations for system operations and related affairs. Provides for development of control center requirements for centralized automation of substations and generation, and BPA participation with other utilities in developing utility operating standards and guides.
- **Marketing, Sales, & Services:** Provides management and direction of transmission rates, provides business strategy in marketing of transmission and ancillary products and services of the Transmission Business Line.
- **Transmission Scheduling:** Provides open access to the Federal transmission system consistent with transmission tariffs approved by FERC. Schedule and market transmission capacity to BPA customers, California ISO and Pacific Northwest's interconnected utilities. Manages the reservations and scheduling of all transmission services associated with the transmission tariffs.

Maintenance	117,900	158,200	155,300
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In all aspects of maintenance, Bonneville is shifting to the implementation of reliability-centered maintenance practices. This change is focused on improving system reliability and significantly reducing maintenance costs.

Access road maintenance costs are expected to increase dramatically as Bonneville deals with the aging roads system and environmental constraints associated with construction, enhancement, and maintenance of access roads. The BPA transmission system encompasses up to 50,000 miles of access roads. Cost increases over current levels could be as much as \$1,000,000 annually.

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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- FY 2001: Continued to refine Reliability Center Maintenance (RCM) practices at all of BPA's O&M regions. Continued to improve performance to meet System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI) targets. Continued efforts to achieve the SAIFI and SAIDI targets of no control chart violations for circuit importance categories 1-2 (highest importance), and not more than one violation for category 4. Control charts are statistically-based graphs which illustrate variability in performance. Utilized retention and recruitment incentives to ensure succession of the current work force and remain competitive as an employer in the utility industry. This included increased benefits for hourly employees as part of a Columbia Power Trades Council (CPTC) agreement to bring our wages in line with the public sector. Increased outage scheduling planning to increase customer satisfaction. Continued high levels of vegetation management.
- FY 2002: Continue to refine RCM practices at all of BPA's O&M regions. Continue to improve performance to meet SAIFI and SAIDI targets as explained above. Continue to prepare for the impact of an expected high attrition rate among BPA's aging workforce by recruiting apprentices and replacements for critical minimum crew size workload positions. Increase outage-scheduling planning to increase customer satisfaction. Continue high levels of vegetation management. Increase access road work to provide reliable access to facilities and ensure environmental compliance.
- FY 2003: Continue to refine RCM practices at all of BPA's O&M regions. Continue to improve performance to meet SAIFI and SAIDI targets as explained above. Continue to prepare for the impact of an expected high attrition rate among BPA's aging workforce by recruiting apprentices and replacements for critical minimum crew size workload positions. Increase outage-scheduling planning to increase customer satisfaction. Continue high levels of vegetation management. Increase access road work to provide reliable access to facilities and ensure environmental compliance.
- Transmission Line Maintenance: Maintain and repair nearly 24,135 km (15,000 circuit miles) of high voltage transmission lines, of which over 6,436 km (4,000 circuit miles) are 500-kV transmission EHV (extra-high voltage), which is two and one-half times more labor-intensive than lower transmission voltages, although more efficient in transmission of power. This responsibility includes maintaining transmission rights of way to ensure system reliability, safety and environmental compliance.
- Substation Maintenance: Provides for service and repair of the transmission system power equipment located at more than 360 work sites annually.

(dollars in thousands)

FY 2001	FY 2002	FY 2003
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- **System Protection Maintenance:** Provides for the maintenance of relaying and metering equipment used to control and protect the electrical transmission system and to meter energy transfers for the purpose of revenue billing. Additionally, field-engineering services provide technical advice and assure the correct operation of power system relaying and special control systems used to support interregional energy transmission capabilities.
- **Power System Control Maintenance:** Provides for the testing, repair, and field engineering support of BPA's highly complex equipment, communications and control systems, including seven major microwave systems and other critical communications and control systems that support the power system.
- **Non-Electric Plant Maintenance:** Provides for the maintenance of BPA's non-electric facilities. Includes site, building, and building utility maintenance; custodial services; station utility; and other maintenance service activities on BPA-owned or BPA-leased non-electric facilities.
- **Maintenance Standards & Engineering:** Provides for establishing, monitoring, and updating system maintenance standards, policies, and procedures; and for the review and update of long-range plans for maintenance of the electric power transmission system.

Total, Transmission Business Line - Operating Expense	215,600	295,500	290,600
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Explanation of Funding Changes From FY 2002 to FY 2003

	FY 2003 vs. FY 2002 (\$000)
Engineering	
■ Minor decrease reflects lower administrative costs	-1,200
Operations	
■ Minor decrease primarily due to rate case estimates of lower administrative costs due to assumed efficiencies.	-800
Maintenance	
■ Minor decrease primarily due to rate case estimates of lower administrative costs due to assumed efficiencies.	-2,900
Total Funding Change, Transmission Business Line – Operating Expense. .	-4,900

Interest, Pension and Post-retirement Benefits - Operating Expense and Capital Transfers

Operating Expense Mission Supporting Goals and Objectives

Interest expense provides for the payment of interest due on FCRPS debt. This consists of capital investment in FCRPS hydroelectric generating and transmission facilities of BPA, the Corps and the Bureau. Investments were financed by Congressional appropriations and BPA borrowings from the U.S. Treasury. BPA repays FCRPS debt through its power sales and transmission services revenues.

Since receiving Treasury borrowing authority in 1974 under the Transmission System Act, all BPA borrowing has been at market rates. As of October 1, 1996, all of BPA's repayment obligations on FCRPS appropriated investment (Corps and Bureau FCRPS investment and BPA investment financed with appropriations prior to the Transmission System Act) which were unpaid as of September 30, 1996, were restructured and assigned new current-market interest rates. The Bonneville Appropriations Refinancing Act of 1996 (Act) called for resetting (reducing) the unpaid principal of FCRPS appropriations and reassigning (increasing) interest rates. New principal amounts were established as of the beginning of FY 1997 at the present value of the principal and annual interest payments BPA would make to the U.S. Treasury for these obligations in the absence of the legislation, plus \$100 million. The new principal amounts are then assigned new interest rates based on the Treasury yield curve rates prevailing at the end of FY 1996. BPA's outstanding repayment obligations on appropriations at the end of FY 1996 were \$6.7 billion with a weighted average interest rate of 3.4 percent. The refinancing reduced the principal amount to \$4.1 billion with a weighted average interest rate of 7.1 percent. Implementation of the refinancing took place in 1997 after audited actual financial data was available. As called for in the legislation, BPA submitted its calculations and interest rate assignments implementing the Act to Treasury for their review and approval. Treasury approved the implementation calculations in July 1997. The Act also calls for all future FCRPS appropriations to be assigned prevailing Treasury yield curve interest rates.

Interest estimates are a direct function of costs of Treasury borrowing to BPA, repayment status of outstanding FCRPS investments, and projected additions to FCRPS plant in service. The interest cost estimates below include the impact of BPA's appropriation refinancing legislation.

The Administration is proposing legislation to require all federal agencies beginning in FY 2003 to pay the full Government share of the accruing cost of retirement for current CSRS employees. The legislation also requires agencies to pay the full accruing cost of post-retirement health benefits for current civilian employees and the post-retirement health costs of all retirees.

Bonneville Pension and Post-retirement Benefits costs, consistent with the proposed legislation, are estimated as follows: \$14.2 million in FY 2001, \$16.6 million in FY 2002, \$17.0 million in FY 2003, \$18.7 million in FY 2004, \$18.9 million in FY 2005, \$19.2 million in FY 2006, and \$19.5 million in FY 2007. The FY 2001 and FY 2002 estimates are comparable to the FY 2003 estimate. These costs would be paid to a receipt account with the Office of Personnel Management. These estimates include a small DOE allocation of Pension and Post-retirement Benefit costs associated with the General Services Administration and the U.S. Geological Survey for FYs 2001-2003. The associated Corps, Bureau, and USFW costs are assumed to be paid by the respective agencies with the power related portion of these costs reimbursed through direct funding by Bonneville. These estimates are subject to revision following additional review.

Bonneville has been paying its unfunded liability of the CSRS and post-retirement benefits into the General Fund of the U.S. Treasury (receipt account 892889) since FY 1998. These payments are consistent with the FY 2001 Administration's budget which assumed Bonneville would prospectively cover the full unfunded liability that accrues in fiscal years after FY 1997 of the Civil Service Retirement and Disability Fund (Disability Fund), the Employees Health Benefits Fund (Health Fund) and the Employees Life Insurance Fund (Insurance Fund) that it had not covered prior to FY 1998. As part of the FY 2001 Administration's Budget, Bonneville assumed its entire CSRS cost recovery would be phased in over a ten-year period given that wholesale power and transmission rates for Bonneville were contractually frozen until the end of FY 2001 in order to meet competitive market pressures. BPA paid \$6 million and \$8 million in FYs 2000 and 2001, respectively, and the following amounts were assumed to be recovered by Bonneville through rates: \$55.2 million in FY 2002, \$35.1 million in FY 2003, \$30.9 million in FY 2004, \$26.6 million in FY 2005, \$24.5 million in FY 2006, and \$21.1 million in FY 2007. Cost estimates include Bonneville and the power related portion of Corps, Bureau of Reclamation, and the United States Fish & Wildlife Pension and Post-retirement Benefits. These estimates are subject to revision following additional review.

Pension and Post-retirement Benefit estimates in this budget for fiscal years beyond 2001 include the difference between those cost estimates currently covered through rates and being paid by Bonneville into receipt account 892889 as described above, and those costs estimated under the proposed legislation. The FY 2001 amount includes the actual amount paid to receipt account 892889.

Funding Schedule (Accrued Expenditures)

	(dollars in thousands)				
	FY 2001	FY 2002	FY 2003	\$ Change	%Change
BPA Bond Interest (Net)	161,900	140,100	158,400	+18,300	13.1%
BPA Appropriation Interest	87,700	66,400	63,500	-2,900	-4.4%
Corps of Engineers Appropriation Interest	145,500	182,800	185,100	+2,300	1.3%
Lower Snake River Comp Plan Interest	16,100	16,300	16,300	0	0%
Bureau of Reclamation Appropriation Interest	40,400	36,400	35,200	-1,200	-3.3%
Subtotal, Interest – Operating Expense	451,600	442,000	458,500	+16,500	+3.7%
Pension & Post-retirement Benefits . . .	8,000	38,600	18,100	-20,500	-53.1%
Total, Interest, Pension and Post- retirement Benefits	459,600	480,600	476,600	-4,000	-0.8%

Capital Transfers

Mission Supporting Goals and Objectives

This activity conveys funds to the U.S. Treasury for repayment of certain FCRPS costs not included in the Associated Project Costs budget. Since capital transfers are cash transactions they are not considered budget obligations.

The FY 2001 BPA bond amortization amount includes a portion of future planned amortization consistent with BPA's capital strategy plan and debt optimization.

Funding Schedule (Accrued Expenditures)

	(dollars in thousands)				
	FY 2001	FY 2002	FY 2003	\$ Change	% Change
BPA Bond Amortization	84,700	174,700	247,300	+72,600	+41.6%
Bureau Bond Amortization	19,500	17,400	0	-17,400	-100%
BPA Appropriation Amortization 1/.	73,000	42,900	0	-42,900	-100%
Corps Appropriation Amortization	59,100	4,000	0	-4,000	-100%
Total, Capital Transfers	236,300	239,000	247,300	+8,300	+3.5%

1/ Includes \$26 million Tenaska reimbursement payment for FY 2001.

**BONNEVILLE POWER ADMINISTRATION
TOTAL OBLIGATIONS/OUTLAYS**

(in millions of dollars)

KGF 30-Jan-02

FISCAL YEAR

BP-1 SUMMARY

5/

	2001		2002		2003		2004	2005	2006	2007
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
1 Residential Exchange	68	68	144	144	144	144	144	144	144	144
2 Power Business Line 1/	3,176	3,176	2,086	2,086	1,908	1,908	1,879	1,907	1,891	1,910
3 Transmission Business Line	399	399	596	596	697	697	716	433	375	369
4 Conservation & Energy Efficiency Services	31	31	61	61	77	77	85	55	52	40
5 Fish & Wildlife	120	120	185	185	188	188	180	160	157	158
6 Interest/ Pension 3/	460	460	481	481	477	477	504	524	539	546
7 Associated Project Costs - Capital	65	65	105	105	117	117	99	39	30	32
8 Capital Equipment	17	17	26	26	25	25	22	7	3	3
9 Planning Council	7	7	8	8	8	8	8	8	8	8
10 Projects Funded in Advance	18	18	25	25	25	25	25	25	25	25
11 Capitalized Bond Premiums	0	0	2	2	3	3	3	1	1	1
12 TOTAL OBLIGATIONS/ OUTLAYS 2/	4,361	4,361	3,719	3,719	3,669	3,669	3,666	3,303	3,226	3,236

REVENUES AND REIMBURSEMENTS

(in millions of dollars)

FISCAL YEAR

BP-1 SUMMARY

	2001		2002		2003		2004	2005	2006	2007
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
13 Revenues 4/	4,009	4,009	3,745	3,745	3,663	3,663	3,826	3,450	3,400	3,400
14 Projects Funded in Advanced	18	18	25	25	25	25	25	25	25	25
15 TOTAL	4,027	4,027	3,770	3,770	3,688	3,688	3,851	3,475	3,425	3,425
BUDGET AUTHORITY (NET)	121		14		(19)		(187)	(171)	(200)	(188)
16 OUTLAYS (NET)		337		(52)		(19)	(187)	(171)	(200)	(188)

- 1/ The Power Business Line includes Fish & Wildlife, Residential Exchange, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.
- 2/ This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of funding estimates.
- 3/ See Interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of Pension & Post-retirement Benefits cost estimates and the impact of proposed legislative funding.
- 4/ Forecasted revenues are assumed to include BPA accrued expenses, depreciation, net revenues adjusted for risk, debt optimization adjustment, and 4(h)(10)(C) and Fish Cost Contingency Fund credits.
- 5/ Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry in the Pacific Northwest.

Updated capital estimates for FYs 2002 through 2003, are based on estimates from both the power and transmission rate cases. These estimates reflect planned infrastructure investments designed to address the long-term needs of the region. Capital estimates for FYs 2004 and beyond reflect reductions assumed from expected program levels, in order to produce estimates that do not exceed Bonneville's current borrowing authority of \$3.75 billion. These outyear estimates reflect the amount of Treasury financing which could be used under the existing \$3.75 billion cap and do not reflect BPA program authority.

BP-2

EXPENSED OBLIGATIONS/OUTLAYS

(in millions of dollars)

FISCAL YEAR

	2001		2002		2003		2004	2005	2006	2007
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
1 Residential Exchange	68	68	144	144	144	144	144	144	144	144
2 Power Business Line 1/	3,176	3,176	2,086	2,086	1,908	1,908	1,879	1,907	1,891	1,910
3 Transmission Business Line	216	216	296	296	291	291	295	301	306	311
4 Conservation & Energy Efficiency Services	31	31	35	35	35	35	34	32	32	31
5 Fish & Wildlife	103	103	150	150	150	150	150	150	150	150
6 Interest/ Pension 2/	460	460	481	481	477	477	504	524	539	546
7 Planning Council	7	7	8	8	8	8	8	8	8	8
8 OBLIGATIONS/ OUTLAYS	4,061	4,061	3,200	3,200	3,013	3,013	3,014	3,066	3,070	3,100
9 Projects Funded in Advance	18	18	25	25	25	25	25	25	25	25

CAPITAL OBLIGATIONS/OUTLAYS

(in millions of dollars)

FISCAL YEAR

BP-2 continued	2001		2002		2003		2004	2005	2006	2007
	Oblig.	Outlays	2,027	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
10 Conservation & Energy Efficiency Services	0	0	26	26	42	42	51	23	20	9
11 Transmission Business Line	183	183	300	300	406	406	421	132	69	58
12 Associated Project Costs - Capital	65	65	105	105	117	117	99	39	30	32
13 Fish & Wildlife	17	17	35	35	38	38	30	10	7	8
14 Capital Equipment	17	17	26	26	25	25	22	7	3	3
15 Capitalized Bond Premiums	0	0	2	2	3	3	3	1	1	1
16 TOTAL CAPITAL INVESTMENTS 1/5	282	282	494	494	631	631	626	212	130	111
17 BORROWING AUTHORITY TO FINANCE CAPITAL OBLIGATIONS 3,4/	307		493		631		626	212	130	111
18 BORROWING TO FINANCE OTHER OBLIGATIONS	1		(242)		(403)		(404)	92	107	50
19 TOTAL BORROWING AUTHORITY	260		251		228		222	304	237	161

- 1/ The Power Business Line includes Fish & Wildlife, Residential Exchange, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.
- 2/ See Interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of Pension & Post-retirement Benefits cost estimates and the impact of proposed legislative funding.
- 3/ This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of funding estimates.
- 4/ Borrowing Authority to Finance Other Obligations represents the use of (positive), or building up of (negative), deferred borrowing. Deferred borrowing is created when Bonneville uses cash from revenues to liquidate capital obligations in lieu of borrowing. This creates the ability in future years to borrow money, when fiscally prudent, to liquidate revenue funded activities. The amount on this line, under the title "Borrowing Authority to Finance Other Obligations" represents the annual use, or creation of deferred borrowing. OMB has requested that Bonneville show this deferred borrowing as a resource carried forward from year-to-year in the manner displayed here.

5/

Updated capital estimates for FYs 2002 through 2003, are based on estimates from both the power and transmission rate cases. These estimates reflect planned infrastructure investments designed to address the long-term needs of the region. Capital estimates for FYs 2004 and beyond reflect reductions assumed from expected program levels, in order to produce estimates that do not exceed Bonneville's current borrowing authority of \$3.75 billion. These outyear estimates reflect the amount of Treasury financing which could be used under the existing \$3.75 billion cap and do not reflect BPA program authority.

CAPITAL OBLIGATIONS/OUTLAYS
With Proposed Borrowing Authority Legislation
(in millions of dollars)

FISCAL YEAR

BP-2	2001		2002		2003		2004	2005	2006	2007
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
10 Conservation & Energy Efficiency Services	0	0	26	26	42	42	60	76	34	9
11 Transmission Business Line	183	183	300	300	406	406	497	442	116	58
12 Associated Project Costs - Capital	65	65	105	105	117	117	117	130	51	32
13 Fish & Wildlife	17	17	35	35	38	38	36	34	12	8
14 Capital Equipment	17	17	26	26	25	25	26	25	5	3
15 Capitalized Bond Premiums	0	0	2	2	3	3	3	3	1	1
16 TOTAL CAPITAL INVESTMENTS 16	282	282	494	494	631	631	739	710	219	111

- 1/ The Power Business Line includes Fish & Wildlife, Residential Exchange, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.
- 2/ See Interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of Pension & Post-retirement Benefits cost estimates and the impact of proposed legislative funding.
- 3/ This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of funding estimates.

The Administration is proposing a \$700 million increase in Bonneville's borrowing authority for planned infrastructure investments. In implementing the new borrowing authority, Bonneville will encourage private-sector or other non-federal financing or joint financing of transmission line expansions and additions, develop a five-year transmission investment plan with the participation of the regional Infrastructure Technical Review Committee or its successor in the region, use funds only for authorized purposes, include the proposed use of the funds in its annual budget submissions, and select projects based on cost effectiveness criteria for achieving the objective.

BP-3

CURRENT SERVICES
(in millions of dollars)
FISCAL YEAR

CAPITAL TRANSFERS		2001 Pymts	2002 Pymts	2003 Pymts	2004 Pymts	2005 Pymts	2006 Pymts	2007 Pymts
Amortization:								
20	BPA Bonds	85	175	247	242	212	130	111
21	Bureau Amortization	19	17	0	0	0	1	1
22	BPA Appropriations 1/	73	43	0	100	140	199	116
23	Corps Appropriations	59	4	0	66	123	107	121
24	TOTAL CAPITAL TRANSFERS	236	239	247	408	475	437	349
STAFFING								
25	FULL-TIME	2,880	3,259	3,278	3,309	3,303	3,279	3,272

1/ Includes \$26 million Tenaska reimbursement payment for FY 2001.

BONNEVILLE POWER ADMINISTRATION
BPA STATUS of BORROWING
CURRENT LEGISLATION
(in millions of dollars)

BP-4A

	2001				2002			
	Net Capital		Net Capital		Net Capital		Net Capital	
	Net Capital	Obs Subject to BA	Net Capital	Bonds Out-standing	Net Capital	Obs Subject to BA	Net Capital	Bonds Out-standing
Cum. - Start-of-Year: 1974 Act	1,675		1,675		1,790		1,790	
Start-of-Year: 1980 Act	811		811		893		893	
Start-of-Year: Total	2,486	2,444	2,486	2,488	2,683	2,641	2,683	2,663
Plus: Annual Increase 1/								
Annual Increase: 1974 Act	200		200		329		329	
Annual Increase: 1980 Act	82		82		166		166	
Annual Borrowing A. Increase	282	282	282		495	495	495	
Treasury Borrowing (Cash)				260				495
Less:								
Bond Amortization: 1974 Act	85		85		89		89	
Bond Amortization: 1980 Act	0		0		86		86	
Total BPA Bond Amortization	85	85	85	85	175	175	175	175
Net Increase/(Decrease):								
1974 Act	115		115		240		240	
1980 Act	82		82		80		80	
Total	197	197	197	175	320	320	320	320
Cum. - End-of-Year: 1974 Act	1,790		1,790		2,030		2,030	
End-of-Year: 1980 Act	893		893		973		973	
End-of-Year: Total	2,683	2,641	2,683	2,663	3,003	2,961	3,003	2,983
Total Borrowing Authority 2/				1,087				767
Total Legislated								
Borrowing Authority 2/				3,750				3,750

1/ In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future. For the preparation of this budget, BPA minimizes its level of Federal debt financing by assuming an optimal allocation of borrowing resources between the Transmission System Act cap and the Northwest Power Act cap. In addition, BPA continues to seek a reduction in its level of debt financing through the following: a) further reduction in capital spending, b) revenue financing, and c) exploring the use of third-party financing, if feasible.

2/ BPA's total legislated borrowing amount arises from the Transmission System Act (PL 93-454). This Act, as amended, provides that the aggregate principal amount of BPA's bonds issued to the Treasury shall not exceed a total of \$3.75 billion.

Updated capital estimates for FYs 2002 through 2003, are based on estimates from both the power and transmission rate cases. These estimates reflect planned infrastructure investments designed to address the long-term needs of the region. Capital estimates for FYs 2004 and beyond reflect reductions assumed from expected program levels, in order to produce estimates that do not exceed Bonneville's current borrowing authority of \$3.75 billion. These outyear estimates reflect the amount of Treasury financing which could be used under the existing \$3.75 billion cap and do not reflect BPA program authority.

FY 2001 is based on unaudited actual results. Audited results could result in a slightly different remaining borrowing authority estimate for FY 2002 and beyond.

BONNEVILLE POWER ADMINISTRATION
BPA STATUS of BORROWING
CURRENT LEGISLATION
(in millions of dollars)

BP-4B

		Fiscal Year							
		2003				2004			
		Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out-standing	Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out-standing
Cum. - Start-of-Year: 1974 Act		2,030		2,030		2,313		2,313	
Start-of-Year: 1980 Act		973		973		1,073		1,073	
Start-of-Year: Total		3,003	2,961	3,003	2,983	3,386	3,344	3,386	3,366
Plus: Annual Increase 1/									
Annual Increase: 1974 Act		433		433		446		446	
Annual Increase: 1980 Act		198		198		180		180	
Annual Borrowing A. Increase		631	631	631		626	626	626	
Treasury Borrowing (Cash)					631				626
Less:									
Bond Amortization: 1974 Act		150		150		215		215	
Bond Amortization: 1980 Act		98		98		27		27	
Total BPA Bond Amortization 2/		248	248	248	248	242	242	242	242
Net Increase/(Decrease):									
1974 Act		283		283		231		231	
1980 Act		100		100		153		153	
Total		383	383	383	383	384	384	384	384
Cum. - End-of-Year: 1974 Act		2,313		2,313		2,544		2,544	
End-of-Year: 1980 Act		1,073		1,073		1,226		1,226	
End-of-Year: Total		3,386	3,344	3,386	3,366	3,770	3,728	3,770	3,750
Total Borrowing Authority 2/					384				0
Total Legislated									
Borrowing Authority 2/					3,750				3,750

1/ In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future. For the preparation of this budget, BPA minimizes its level of Federal debt financing by assuming an optimal allocation of borrowing resources between the Transmission System Act cap and the Northwest Power Act cap. In addition, BPA continues to seek a reduction in its level of debt financing through the following: a) further reduction in capital spending, b) revenue financing, and c) exploring the use of third-party financing, if feasible.

2/ BPA's total legislated borrowing amount arises from the Transmission System Act (PL 93-454). This Act, as amended, provides that the aggregate principal amount of BPA's bonds issued to the Treasury shall not exceed a total of \$3.75 billion.

Updated capital estimates for FYs 2002 through 2003, are based on estimates from both the power and transmission rate cases. These estimates reflect planned infrastructure investments designed to address the long-term needs of the region. Capital estimates for FYs 2004 and beyond reflect reductions assumed from expected program levels, in order to produce estimates that do not exceed Bonneville's current borrowing authority of \$3.75 billion. These outyear estimates reflect the amount of Treasury financing which could be used under the existing \$3.75 billion cap and do not reflect BPA program authority.

BONNEVILLE POWER ADMINISTRATION
BPA STATUS of BORROWING
CURRENT LEGISLATION
(in millions of dollars)

BP-4C

		Fiscal Year							
		2005				2006			
		Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out-standing	Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out-standing
Cum. - Start-of-Year: 1974 Act		2,544		2,544		2,497		2,497	
Start-of-Year: 1980 Act		1,226		1,226		1,273		1,273	
Start-of-Year: Total		3,770	3,728	3,770	3,750	3,770	3,728	3,770	3,750
Plus: Annual Increase 1/									
Annual Increase: 1974 Act		140		140		73		73	
Annual Increase: 1980 Act		72		72		57		57	
Annual Borrowing A. Increase		212	212	212		130	130	130	
Treasury Borrowing (Cash)					212				130
Less:									
Bond Amortization: 1974 Act		187		187		110		110	
Bond Amortization: 1980 Act		25		25		20		20	
Total BPA Bond Amortization 2/		212	212	212	212	130	130	130	130
Net Increase/(Decrease):									
1974 Act		(47)		(47)		(37)		(37)	
1980 Act		47		47		37		37	
Total		0	0	0	0	0	0	0	0
Cum. - End-of-Year: 1974 Act		2,497		2,497		2,460		2,460	
End-of-Year: 1980 Act		1,273		1,273		1,310		1,310	
End-of-Year: Total		3,770	3,728	3,770	3,750	3,770	3,728	3,770	3,750
Total Borrowing Authority 2/					0				0
Total Legislated									
Borrowing Authority 2/					3,750				3,750

1/ In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future. For the preparation of this budget, BPA minimizes its level of Federal debt financing by assuming an optimal allocation of borrowing resources between the Transmission System Act cap and the Northwest Power Act cap. In addition, BPA continues to seek a reduction in its level of debt financing through the following: a) further reduction in capital spending, b) revenue financing, and c) exploring the use of third-party financing, if feasible.

2/ BPA's total legislated borrowing amount arises from the Transmission System Act (PL 93-454). This Act, as amended, provides that the aggregate principal amount of BPA's bonds issued to the Treasury shall not exceed a total of \$3.75 billion.

Updated capital estimates for FYs 2002 through 2003, are based on estimates from both the power and transmission rate cases. These estimates reflect planned infrastructure investments designed to address the long-term needs of the region. Capital estimates for FYs 2004 and beyond reflect reductions assumed from expected program levels, in order to produce estimates that do not exceed Bonneville's current borrowing authority of \$3.75 billion. These outyear estimates reflect the amount of Treasury financing which could be used under the existing \$3.75 billion cap and do not reflect BPA program authority.

BONNEVILLE POWER ADMINISTRATION
BPA STATUS of BORROWING
CURRENT LEGISLATION
(in millions of dollars)

BP-4D

		Fiscal Year			
		2007			
		Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out- standing
Cum. - Start-of-Year: 1974 Act		2,460		2,460	
Start-of-Year: 1980 Act		1,310		1,310	
Start-of-Year: Total		3,770	3,728	3,770	3,750
Plus: Annual Increase 1/					
Annual Increase: 1974 Act		62		62	
Annual Increase: 1980 Act		49		49	
Annual Borrowing A. Increase		111	111	111	
Treasury Borrowing (Cash)					111
Less:					
Bond Amortization: 1974 Act		111		111	
Bond Amortization: 1980 Act		0		0	
Total BPA Bond Amortization 2/		111	111	111	111
Net Increase/(Decrease):					
1974 Act		(49)		(49)	
1980 Act		49		49	
Total		0	0	0	0
Cum. - End-of-Year: 1974 Act		2,411		2,411	
End-of-Year: 1980 Act		1,359		1,359	
End-of-Year: Total		3,770	3,728	3,770	3,750
Total Borrowing Authority 2/					0
Total Legislated					
Borrowing Authority 2/					3,750

1/ In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future. For the preparation of this budget, BPA minimizes its level of Federal debt financing by assuming an optimal allocation of borrowing resources between the Transmission System Act cap and the Northwest Power Act cap. In addition, BPA continues to seek a reduction in its level of debt financing through the following: a) further reduction in capital spending, b) revenue financing, and c) exploring the use of third-party financing, if feasible.

2/ BPA's total legislated borrowing amount arises from the Transmission System Act (PL 93-454). This Act, as amended, provides that the aggregate principal amount of BPA's bonds issued to the Treasury shall not exceed a total of \$3.75 billion.

Updated capital estimates for FYs 2002 through 2003, are based on estimates from both the power and transmission rate cases. These estimates reflect planned infrastructure investments designed to address the long-term needs of the region. Capital estimates for FYs 2004 and beyond reflect reductions assumed from expected program levels, in order to produce estimates that do not exceed Bonneville's current borrowing authority of \$3.75 billion. These outyear estimates reflect the amount of Treasury financing which could be used under the existing \$3.75 billion cap and do not reflect BPA program authority.

BONNEVILLE POWER ADMINISTRATION
BPA STATUS of BORROWING
PROPOSED LEGISLATION 11
(in millions of dollars)

BP-4A

Fiscal Year

	2001				2002			
	Net Capital		Net Bonds		Net Capital		Net Bonds	
	Net Capital	Obs Subject to BA	Net Capital	Bonds Out-standing	Net Capital	Obs Subject to BA	Net Capital	Bonds Out-standing
	Obs		Expend.		Obs		Expend.	
Cum. - Start-of-Year: 1974 Act	1,675		1,675		1,791		1,791	
Start-of-Year: 1980 Act	811		811		893		893	
Start-of-Year: Proposed	0		0		0		0	
Start-of-Year: Total	2,486	2,444	2,486	2,488	2,683	2,641	2,683	2,663
Plus: Annual Increase 2/								
Annual Increase: 1974 Act	200		200		329		329	
Annual Increase: 1980 Act	82		82		166		166	
Annual Increase: Proposed	0		0		0		0	
Annual Borrowing A. Increase	282	282	282		495	495	495	
Treasury Borrowing (Cash)				260				495
Less:								
Bond Amortization: 1974 Act	85		85		89		89	
Bond Amortization: 1980 Act	0		0		86		86	
Bond Amortization: Proposed	0		0		0		0	
Total BPA Bond Amortization	85	85	85	85	175	175	175	175
Net Increase/(Decrease):								
1974 Act	116		116		240		240	
1980 Act	82		82		80		80	
Proposed Act	0		0		0		0	
Total	197	197	197	175	320	320	320	320
Cum. - End-of-Year: 1974 Act	1,791		1,791		2,030		2,030	
End-of-Year: 1980 Act	893		893		973		973	
End-of-Year: Proposed	0		0		0		0	
End-of-Year: Total	2,683	2,641	2,683	2,663	3,003	2,961	3,003	2,983
Total Borrowing Authority 3/				1,087				767
Total Legislated								
Borrowing Authority 3/				3,750				3,750

1/ This table reflects \$700 million in new borrowing authority legislation in FY 2003. BPA's existing remaining borrowing authority is not sufficient to fund all projects identified to help relieve the region's infrastructure problems. Thus \$700 million in new borrowing authority is assumed in FY 2003. Projected amortization estimates currently are allocated between the existing acts establishing borrowing authority and are subject to change with establishment of proposed legislation.

2/ In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future. For the preparation of this budget, BPA minimizes its level of Federal debt financing by assuming an optimal allocation of borrowing resources between the Transmission System Act cap and the Northwest Power Act cap. In addition, BPA continues to manage its level of debt financing through the following: a) revenue financing, and b) exploring the use of third-party financing, if feasible.

3/ BPA's total legislated borrowing amount arises from the Transmission System Act (PL 93-454). This Act, as amended, provides that the aggregate principal amount of BPA's bonds issued to the Treasury shall not exceed a total of \$3.75 billion. This BP-4 Table for Proposed Legislation provides that the aggregate principal amount of BPA's bonds issued to the Treasury shall not exceed \$4.45 billion as of FY 2003.

The proposed increase in borrowing authority of \$700 million is consistent with planned infrastructure investments designed to address long-term regional needs. Updated capital estimates for FYs 2002 through 2003, are based on estimates from both the power and transmission rate cases. FYs 2002 through 2006 include planned infrastructure investments assuming the additional \$700 million in borrowing authority. Beyond FY 2006, capital amounts reflect reductions assumed from expected program levels (including infrastructure) in order to produce estimates that do not exceed BPA's current borrowing authority of \$3.75 billion. These outyear estimates reflect the amount of Treasury financing which could be used under the existing \$3.75 billion cap and do not reflect BPA program authority.

This budget submission does not reflect potential private, non-federal and joint financing of capital investment projects.

BONNEVILLE POWER ADMINISTRATION
BPA STATUS of BORROWING
PROPOSED LEGISLATION 11
(in millions of dollars)

BP-4B

Fiscal Year

	2003				2004			
	Net Capital		Net Bonds		Net Capital		Net Bonds	
	Net Capital	Obs Subject to BA	Net Capital	Bonds Out-standing	Net Capital	Obs Subject to BA	Net Capital	Bonds Out-standing
	Obs		Expend.		Obs		Expend.	
Cum. - Start-of-Year: 1974 Act	2,030		2,030		2,313		2,313	
Start-of-Year: 1980 Act	973		973		1,073		1,073	
Start-of-Year: Proposed	0		0		0		0	
Start-of-Year: Total	3,003	2,961	3,003	2,983	3,386	3,344	3,386	3,366
Plus: Annual Increase 2/								
Annual Increase: 1974 Act	433		433		446		446	
Annual Increase: 1980 Act	198		198		180		180	
Annual Increase: Proposed	0		0		113		113	
Annual Borrowing A. Increase	631	631	631		739	739	739	
Treasury Borrowing (Cash)				631				739
Less:								
Bond Amortization: 1974 Act	150		150		215		215	
Bond Amortization: 1980 Act	98		98		27		27	
Bond Amortization: Proposed	0		0		0		0	
Total BPA Bond Amortization	248	248	248	248	242	242	242	242
Net Increase/(Decrease):								
1974 Act	283		283		231		231	
1980 Act	100		100		153		153	
Proposed Act	0		0		113		113	
Total	383	383	383	383	497	497	497	497
Cum. - End-of-Year: 1974 Act	2,313		2,313		2,544		2,544	
End-of-Year: 1980 Act	1,073		1,073		1,226		1,226	
End-of-Year: Proposed	0		0		113		113	
End-of-Year: Total	3,386	3,344	3,386	3,366	3,883	3,841	3,883	3,863
Total Borrowing Authority 3/				1,084				567
Total Legislated								
Borrowing Authority 3/				4,450				4,450

1/ This table reflects \$700 million in new borrowing authority legislation in FY 2003. BPA's existing remaining borrowing authority is not sufficient to fund all projects identified to help relieve the region's infrastructure problems. Thus \$700 million in new borrowing authority is assumed in FY 2003. Projected amortization estimates currently are allocated between the existing acts establishing borrowing authority and are subject to change with establishment of proposed legislation.

2/ In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future. For the preparation of this budget, BPA minimizes its level of Federal debt financing by assuming an optimal allocation of borrowing resources between the Transmission System Act cap and the Northwest Power Act cap. In addition, BPA continues to manage its level of debt financing through the following: a) revenue financing, and b) exploring the use of third-party financing, if feasible.

3/ BPA's total legislated borrowing amount arises from the Transmission System Act (PL 93-454). This Act, as amended, provides that the aggregate principal amount of BPA's bonds issued to the Treasury shall not exceed a total of \$3.75 billion. This BP-4 Table for Proposed Legislation provides that the aggregate principal amount of BPA's bonds issued to the Treasury shall not exceed \$4.45 billion as of FY 2003.

The proposed increase in borrowing authority of \$700 million is consistent with planned infrastructure investments designed to address long-term regional needs. Updated capital estimates for FYs 2002 through 2003, are based on estimates from both the power and transmission rate cases. FYs 2002 through 2006 include planned infrastructure investments assuming the additional \$700 million in borrowing authority. Beyond FY 2006, capital amounts reflect reductions assumed from expected program levels (including infrastructure) in order to produce estimates that do not exceed BPA's current borrowing authority of \$3.75 billion. These outyear estimates reflect the amount of Treasury financing which could be used under the existing \$3.75 billion cap and do not reflect BPA program authority.



July 11, 2001

Chairman Robert C. Byrd
Senate Committee on Appropriations
311 Senate Hart Office Building
Washington, DC 20510

Dear Chairman Byrd:

On behalf of Avista Corporation, Idaho Power Company, Montana Power Company, PacifiCorp, Portland General Electric, and Puget Sound Energy, Inc., I am writing to voice our strong support for increasing the borrowing authority of the Bonneville Power Administration (BPA) as part of the Energy and Water Appropriations bill that will be considered by your Committee tomorrow. We believe that this is a critical step toward improving the capacity and reliability of BPA's transmission system, for the benefit of consumers throughout the Pacific Northwest. We are pleased to inform you that BPA has recently agreed to form a technical review committee with its transmission customers to assure that transmission improvements are prioritized so as to provide the most cost-effective and reliable service for the region. We respectfully request that language in support of the formation of this committee be included in your Committee report.

If you or your staff have any questions, please feel free to call me.

RECEIVED BY BPA ADMINISTRATOR'S UFC-LOG #:01-0368
RECEIPT DATE: 7-12-01
DUE DATE: INFO ONLY

A, D, KN, DF, L, P, T

Sincerely,

James Litchfield
Consultant for the
Investor Owned Utilities
503-222-9480
lchg@europa.com

BONNEVILLE POWER ADMINISTRATION
BPA STATUS of BORROWING
PROPOSED LEGISLATION 11
(in millions of dollars)

BP-4D

Fiscal Year

	2007			
	Net Capital		Net Bonds	
	Net Capital Obs	Subject to BA	Capital Expend.	Out-standing
Cum. - Start-of-Year: 1974 Act	2,460		2,460	
Start-of-Year: 1980 Act	1,310		1,310	
Start-of-Year: Proposed	700		700	
Start-of-Year: Total	4,470	4,428	4,470	4,450
Plus: Annual Increase 2/				
Annual Increase: 1974 Act	62		62	
Annual Increase: 1980 Act	49		49	
Annual Increase: Proposed	0		0	
Annual Borrowing A. Increase	111	111	111	
Treasury Borrowing (Cash)				111
Less:				
Bond Amortization: 1974 Act	111		111	
Bond Amortization: 1980 Act	0		0	
Bond Amortization: Proposed	0		0	
Total BPA Bond Amortization 2/	111	111	111	111
Net Increase/(Decrease):				
1974 Act	(49)		(49)	
1980 Act	49		49	
Proposed Act	0		0	
Total	(0)	(0)	(0)	(0)
Cum. - End-of-Year: 1974 Act	2,411		2,411	
End-of-Year: 1980 Act	1,359		1,359	
End-of-Year: Proposed	700		700	
End-of-Year: Total	4,470	4,428	4,470	4,450
Total Borrowing Authority 3/				0
Total Legislated				
Borrowing Authority 3/				4,450

1/ This table reflects \$700 million in new borrowing authority legislation in FY 2003. BPA's existing remaining borrowing authority is not sufficient to fund all projects identified to help relieve the region's infrastructure problems. Thus \$700 million in new borrowing authority is assumed in FY 2003. Projected amortization estimates currently are allocated between the existing acts establishing borrowing authority and are subject to change with establishment of proposed legislation.

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TREASURY PAYMENTS

(in millions of dollars)

		FISCAL YEAR						
		2001	2002	2003	2004	2005	2006	2007
A. INTEREST ON BONDS & APPROPRIATIONS								
Bonneville Bond Interest								
1	Bonneville Bond Interest (net)	162	140	158	184	210	239	266
2	AFUDC 1/	12	11	14	16	16	15	15
Appropriations Interest								
3	Bonneville	88	66	63	63	56	46	32
4	Corps of Engineers 2/	146	183	185	192	199	197	196
5	Lower Snake River Comp. Plan	16	16	16	16	16	16	16
6	Bureau of Reclamation Interest 3/	40	36	35	35	35	35	35
7	Total Bond and Approp. Interest	464	452	471	506	532	548	560
B. ASSOCIATED PROJECT COST								
8	Bureau of Reclamation Irrigation Assistance	17	0	0	1	0	0	0
9	Bureau of Rec. O & M 4/	0	0	0	0	0	0	0
10	Corps of Eng. O & M 4/	0	0	0	0	0	0	0
11	L. Snake River Comp. Plan O & M 4/	0	0	0	0	0	0	0
12	Total Assoc. Project Costs	17	0	0	1	0	0	0
C. CAPITAL TRANSFERS								
Amortization								
13	Bonneville Bonds 5/	85	175	247	242	212	130	111
14	Bureau of Reclamation Amortization	19	17	0	0	0	1	1
15	Corps of Engineers	59	4	0	66	123	107	121
	Lower Snake River Comp. Plan	0	0	0	0	0	0	0
17	Bonneville Appropriations 6/	73	43	0	100	140	199	116
	Total Capital Transfers	236	239	247	408	475	437	349
D. OTHER PAYMENTS								
18	Unfunded CSRS Liability 7/	8	39	18	12	8	5	2
21	TOTAL TREASURY PAYMENTS 8/	725	730	736	927	1,015	990	911

1/ This interest cost is capitalized and included in Bonneville's Transmission System Development, System Replacements, and Associated Projects Capital programs. AFUDC is financed through the sale of bonds.

2/ Includes interest on construction funding for Corps of Engineers (Corps) fish bypass facilities at Corps dams in the Columbia River Basin, including Lower Monumental, Ice Harbor, and The Dalles dams, as called for in the Fish Spillway Memorandum of Agreement approved on April 10, 1989.

3/ Includes payments paid by Bureau to Treasury on behalf of Bonneville.

4/ Costs for power O&M is funded directly by Bonneville as follows (in millions)

	FISCAL YEAR						
	2001	2002	2003	2004	2005	2006	2007
Bureau of Reclamation	54	57	59	61	63	65	67
Corps of Engineers	117	117	125	128	131	134	139
Lower Snake River comp Plan	4	15	16	17	18	19	20

Bureau O&M budget estimates do not reflect approximately \$10 million in Bureau of Reclamation cost savings of which \$3 million can be spent in a single fiscal year.

Bonneville, through FY 2006, also directly funds the Corps of Engineers \$6 million annually for small capital power O & M items. Funding for these small capital power items is included within the Power Business Line capital budget.

5/ FY2001 payment includes portion of future planned amortization consistent with BPA's capital strategy plan and debt optimization plan.

6/ Includes \$26 million Tenaska reimbursement payment for FY 2001.

7/ See Interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates and the impact of proposed legislative funding.

8/ Does not include Treasury bond premiums on refinanced Treasury bonds.

OBJECT CLASSIFICATION STATEMENT

(in millions of dollars)

IDENTIFICATION CODE: 89-4045-0-3-271

DIRECT OBLIGATIONS

ESTIMATES

	2001	2002	2003
11.1 Full-time permanent	180	154	152
11.3 Other than full-time permanent	3	2	2
11.5 Other personnel compensation	17	15	15
11.9 Total personnel comp.	200	171	169
12.1 Civilian personnel benefits	47	40	39
21.0 Travel and transportation of persons	9	8	7
22.0 Transportation of things	6	5	5
23.1 Rental payments to GSA	11	9	9
23.2 Rents, other	11	9	9
23.3 Communication, utilities & misc. charges	5	5	4
24.0 Printing and reproduction	0	0	0
25.1 Consulting Services	11	10	10
25.2 Other services	3,298	2,811	2,775
25.3 Purchases from Government Accounts	189	161	159
25.5 R & D Contracts	2	2	2
26.0 Supplies and materials	41	35	35
31.0 Equipment	24	20	20
32.0 Lands and structures	22	19	19
41.0 Grants, subsidies, contributions	24	20	20
43.0 Interest and dividends	461	393	387
99.0 Subtotal obligations	4,361	3,718	3,669
99.9 Total obligations	4,361	3,718	3,669

Estimate of Proprietary Receipts
(In millions of dollars)

	Fiscal Year						
	2001	2002	2003	2004	2005	2006	2007
Bureau Interest	40	36	35	35	35	35	35
Bureau Amortization	19	17	0	0	0	1	1
Bureau O&M	0	0	0	0	0	0	0
Bureau Irrig. Assist.	17	0	0	1	0	0	0
Revenues Collected by Bureau							
Distributed in Treasury Account(credit)	-6	-7	-7	-7	-7	-7	-7
4(H)(10)@Revenues	-53						
Colville Settlement (credit)	-18	-5	-5	-5	-5	-5	-5
Total 1/	-1	41	23	24	23	24	24
CSRS	8	39	18	12	8	5	23
LSRCP O&M	3						
Total 2/	11	39	18	12	8	5	23

1/ Includes amortization of appropriations and irrigation assistance, and interest costs for the Bureau of Reclamation.

The cost of power O&M for Bureau of Reclamation is no longer included in Proprietary Receipts due to Direct Funding by Bonneville. Represents transfers to Account #895000.26

2/ The costs of power O&M for Corps of Engineers and Lower Snake Comp. Plan are no longer included in Proprietary Receipts due to Direct Funding by Bonneville.

Represents transfers to Account #892889, Repayments on misc. recoverable costs, not otherwise classified.

Costs for power O&M is funded directly by Bonneville as follows (in millions)

2001	2002	2003	2004	2005	2006	2007
54	57	59	61	63	65	67
117	117	125	128	131	134	139
4	15	16	17	18	19	20

Bureau O&M budget estimates do not reflect approximately \$10 million in Bureau of Reclamation cost savings of which \$3 million can be spent in a single fiscal year.

Bonneville, through FY 2006, also directly funds the Corps of Engineers \$6 million annually for small capital power O & M items. Funding for these small capital power items is included within the Power Business Line capital budget.

See Interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of Pension & Post-retirement Benefits cost estimates and the impact of proposed legislative funding.

**Executive Summary
BPA Fish and Wildlife MOA Funding
(Dollars in Millions)
3/13/2001**

	FY	Actual 1996	Actual 1997	Actual 1998	Actual 1999	Actual 2000	Est 2001	96-01 Total	96-01 Avg	Est 2002	Est 2003	Est 2004
Direct Program Expenses										1.8	1.8	1.8
MOA Plan		100.0	100.0	100.0	100.0	100.0	100.0	600.0	100.0			
Avg Expenditure Amount Available 1/		100.0	133.1	153.5	150.7	144.6	138.7					
Actual (FY 1996-2000); Planned (FY 2001) 2/		68.5	82.2	104.9	108.2	108.2	110.0	581.9	97.0			
Carry Forward Balance 3/ 4/		31.5	50.9	48.6	42.5	36.4	28.7					
Reimbursable F&W Expenses of Other Agencies												
MOA Plan		38.4	40.5	40.5	40.5	40.5	40.5	240.9	40.2			
Avg Expenditure Amount Available		40.2	45.3	50.0	54.4	56.6	60.4					
Actual (FY 1996-2000); Planned (FY 2001)		35.4	35.9	36.4	38.9	37.6	48.5	232.7	38.8			
Carry Forward Balance 4/		4.8	9.4	13.6	15.5	19.0	11.9					
Capital Investments Fixed Expenses												
MOA Plan		73.1	87.2	105.7	117.7	129.3	156.0	669.0	111.5			
Avg Expenditure Amount Available 1/		111.5	151.9	190.3	233.4	278.6	325.4					
Actual (FY 1996-2000); Planned (FY 2001)		73.1	76.3	74.1	76.1	77.2	90.9	467.6	77.9			
Carry Forward Balance 4/		38.4	75.6	116.2	157.3	201.4	234.5					
Total												
MOA Plan		211.5	227.7	246.2	258.2	269.8	296.5	1,509.9	251.7			
Avg Expenditure Amount Available 1/		251.7	330.3	393.8	438.5	479.8	524.5					
Actual Expenditures		176.9	194.3	215.4	223.2	222.9	249.4					
Carry Forward Balance 4/		74.8	136.0	178.4	215.3	256.8	275.0					
River Operations												
Power Purchases 5/		0.0	0.0	5.4			95.9	101.3	16.9			
Foregone Revenues 5/		81.7	107.8	116.5			64.6	370.6	61.8			
Other 7/		4.0	4.0	4.0			4.3	16.3	2.7			
Total		85.7	111.8	125.9	NA	NA	164.8	488.2	81.4			
Actual Expenditures Grand Total		262.6	306.1	341.3	223.2	222.9	414.2	1,770.4	295.1	6/		
EBA Related Transmission Enhancements		0.0	12.7	0.0	0.0	0.0	0.0	12.7	2.1			

Assumptions:

Actual Expenditures for all expenses and capital investments reflect FY 1996 - 2000 actual results. For FY's 2000 through 2000, program expenses and capital investments are consistent with the Fish and Wildlife Budget Memorandum of Agreement for fiscal years 1996 - 2001. This funding stream shows the most likely accruals related to Obligations from the NWPPC prioritization process. Actual accruals may be more or less during a given year within the 6 year MOA period. No agreement has been reached at this time on BPA's Fish and Wildlife Budget for fiscal years beyond 2001. However, under the Fish and Wildlife Funding Principles, announced September 16, 1998, Bonneville will assure that its' post - 2001 rate case provides for a wide range of future options.

Notes:

- 1/ In addition, \$27 million per year in capital funding (borrowing) will be provided by BPA for the Direct Program through 2001. The Interest and Amortization for this is reflected in the Expenditures Plan for the Capital Investment category.
- 2/ This information is reported on an accrual basis. For Direct Program management purposes, BPA also reports these expenditures on an obligations basis. Typically the accruals lag the obligations, since not all funds are expended in the year in which they are obligated.
- 3/ BPA's FY 1996 - 2001 Fish and Wildlife Program Expense Budget is \$100 million per year. Actual expenses for FY 1996 - 2000 were approximately \$36.4 million less than what was available. BPA, in accordance with the MOA, will carry forward this amount with interest.
- 4/ Original MOA Plan included interest at 5.093 percent for FY 1999 - 2001. The actual interest rate is determined annually (10/1). The interest rate for FY 1996 is 5.083%, 1997 is 5.093%, 1998 is 4.221%, 1999 is 4.864%, 2000 is 6.193%. Estimated interest for FY 2001 is 6.193%.
- 5/ Estimated for FY 1996-1998, actual amount will change when the river models are executed. For FY 1999 & 2000, final hydro operations values require information on actual hydrological conditions. This information is not yet available.
- 6/ During the initial discussions when developing the MOA, the "96-01 Avg" was estimated to be about \$435 million.
- 7/ These estimated costs are related to limitations placed on operating ranges (forebay levels and generator efficiency) and other operations for fish which produce effects on power production not identified in Hydro regulation models.
- 8/ BPA worked with the NW Power Planning Council, the Columbia Basin tribes, state and federal agencies, and public interest groups to develop an expected range for BPA's fish and wildlife costs for 2002-2006. As of December 2000 the total estimated annual average financial impact on BPA, for the region's fish and wildlife programs ranges from \$430 million to over \$781 million per year. This range of costs was used to develop the rate proposal for the 2002-2006 power rate case.

FISH AND WILDLIFE CROSSCUT

(dollars in millions)

	First	FY 1978-					TABLE 1
	Funded by:	FY 1980	FY 1981	FY 1982	FY 1983	FY 1984	Subtotal 78-84
CAPITAL INVESTMENTS							
BPA Fish and Wildlife 1/	BPA	0	0	0	0	0	0
Associated Projects (Federal Hydro) 2/	COE	30.0	17.9	81.7	55.1	9.0	173.7
TOTAL CAPITAL INVESTMENTS		30.0	17.9	81.7	55.1	9.0	173.7
PROGRAM OPERATING EXPENSES							
BPA DIRECT FISH AND WILDLIFE PROGRAM 1/							
Non-ESA Activities	BPA	2.3	2.3	4.6	9.1	19.6	37.9
ESA Activities	BPA	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal		2.3	2.3	4.6	9.1	19.6	37.9
BPA PWR. PURCH. FOR FISH ENHANCE. (NET) THRU FY 1993							
Existing Water Budget 3/	BPA	0.0	0.0	0.0	0.0	12.0	12.0
ESA Implementation 4/	BPA	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal		0.0	0.0	0.0	0.0	12.0	12.0
BPA PWR. PURCH. FOR FISH ENHANCE. (NET) EFF. FY 1994 5/							
U. Columbia River Water Budget	BPA	—	—	—	—	—	—
Spill for Juvenile/Adult Passage 6/	BPA	—	—	—	—	—	—
Flow Augmentation 7/	BPA	—	—	—	—	—	—
Reduced Forebay Levels	BPA	—	—	—	—	—	—
ESA - NMFS Fund (Add. Spill for Juvenile Passage)	BPA	—	—	—	—	—	—
Subtotal		—	—	—	—	—	—
REIMBURSABLE (ASSOC. PROJECTS - FEDERAL HYDRO)							
O&M Lower Snake River Hatcheries	USFWS	0.0	0.5	1.0	2.2	3.6	7.3
O&M Corps (w/bypass eff. FY 1992)	COE	15.0	5.4	7.6	9.1	10.0	47.1
O&M Bureau (hatchery eff. FY 1992)	BOR	0.0	0.0	0.0	0.0	0.0	0.0
Other (NW Power Planning Council)	BPA	0.0	0.2	2.9	2.9	2.4	8.4
Subtotal		15.0	6.1	11.5	14.2	16.0	62.8
TOTAL PROGRAM OPERATING EXPENSES		17.3	8.4	16.1	23.3	47.6	112.7
PROGRAM RELATED FIXED EXPENSES 8/							
Interest Expense	BPA	15.0	6.4	9.2	12.1	12.7	55.4
Amortization Expense	BPA	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation Expense	BPA	9.0	2.4	3.2	3.8	3.9	22.3
TOTAL PROGRAM FIXED EXPENSES		24	8.8	12.4	15.9	16.6	77.7
GRAND TOTAL PROGRAM EXPENSES		41.3	17.2	28.5	39.2	64.2	190.4
FOREGONE REVENUES THRU FY 1993							
Spill (at Federal dams)	BPA	0.0	3.0	14.0	1.0	8.0	26.0
ESA Drawdown - Minimum Operating Pool 10/	BPA	0.0	0.0	0.0	0.0	0.0	0.0
		0.0	3.0	14.0	1.0	8.0	26.0
FOREGONE REVENUES FY 1994 5/							
U. Columbia River Water Budget	BPA	—	—	—	—	—	—
Spill for Juvenile Passage 6/	BPA	—	—	—	—	—	—
Flow Augmentation	BPA	—	—	—	—	—	—
Reduced Forebay Levels 10/	BPA	—	—	—	—	—	—
ESA - NMFS Fund (Add. Spill for Juvenile Passage)	BPA	—	—	—	—	—	—
Subtotal		—	—	—	—	—	—
TOTAL - PROGRAM EXP. & FOREGONE REVENUES		41.3	20.2	42.5	40.2	72.2	216.4

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THIS TABLE.

FISH AND WILDLIFE CROSSCUT

(dollars in millions)

	First Funded by:
CAPITAL INVESTMENTS	
BPA Fish and Wildlife 1/	BPA
Associated Projects (Federal Hydro) 2/	COE
TOTAL CAPITAL INVESTMENTS	
PROGRAM OPERATING EXPENSES	
BPA DIRECT FISH AND WILDLIFE PROGRAM 1/	
Non-ESA Activities	BPA
ESA Activities	BPA
Subtotal	
BPA PWR. PURCH. FOR FISH ENHANCE. (NET) THRU FY 1993	
Existing Water Budget 3/	BPA
ESA Implementation 4/	BPA
Subtotal	
BPA PWR. PURCH. FOR FISH ENHANCE. (NET) EFF. FY 1994 5/	
U. Columbia River Water Budget	BPA
Spill for Juvenile/Adult Passage 6/	BPA
Flow Augmentation 7/	BPA
Reduced Forebay Levels	BPA
ESA - NMFS Fund (Add. Spill for Juvenile Passage)	BPA
Subtotal	
REIMBURSABLE (ASSOC. PROJECTS - FEDERAL HYDRO)	
O&M Lower Snake River Hatcheries	USFWS
O&M Corps (w/bypass eff. FY 1992)	COE
O&M Bureau (hatchery eff. FY 1992)	BOR
Other (NW Power Planning Council)	BPA
Subtotal	
TOTAL PROGRAM OPERATING EXPENSES	
PROGRAM RELATED FIXED EXPENSES 9/	
Interest Expense	BPA
Amortization Expense	BPA
Depreciation Expense	BPA
TOTAL PROGRAM FIXED EXPENSES	
GRAND TOTAL PROGRAM EXPENSES	
FOREGONE REVENUES THRU FY 1993	
Spill (at Federal dams)	BPA
ESA Drawdown - Minimum Operating Pool 10/	BPA
FOREGONE REVENUES FY 1994 5/	
U. Columbia River Water Budget	BPA
Spill for Juvenile Passage 6/	BPA
Flow Augmentation	BPA
Reduced Forebay Levels 10/	BPA
ESA - NMFS Fund (Add. Spill for Juvenile Passage)	BPA
Subtotal	
TOTAL - PROGRAM EXP. & FOREGONE REVENUES	
THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THIS TABLE.	

FISH AND WILDLIFE CROSSCUT

(dollars in millions)

		First						TABLE 2
		Funded by: FY 1985	FY 1986	FY 1987	FY 1988	FY 1989	FY 1990	Subtotal 85-90
CAPITAL INVESTMENTS								
BPA Fish and Wildlife 1/	BPA	10.2	8	4.7	7.7	8.3	16.2	55.1
Associated Projects (Federal Hydro) 2/	COE	48.4	9.1	78.6	7.6	5.3	4.5	151.5
TOTAL CAPITAL INVESTMENTS		58.6	17.1	83.3	15.3	13.6	20.7	206.6
PROGRAM OPERATING EXPENSES								
BPA DIRECT FISH AND WILDLIFE PROGRAM 1/								
Non-ESA Activities	BPA	15.9	19.8	22.2	18.8	23.0	32.8	132.3
ESA Activities	BPA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal		15.9	19.8	22.2	18.8	23.0	32.8	132.3
BPA PWR. PURCH. FOR FISH ENHANCE. (NET) THRU FY 1993								
Existing Water Budget 3/	BPA	17.0	74.0	11.0	40.0	40.0	40.0	222.0
ESA Implementation 4/	BPA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal		17.0	74.0	11.0	40.0	40.0	40.0	222.0
BPA PWR. PURCH. FOR FISH ENHANCE. (NET) EFF. FY 1994 5/								
U. Columbia River Water Budget	BPA	---	---	---	---	---	---	---
Spill for Juvenile/Adult Passage 6/	BPA	---	---	---	---	---	---	---
Flow Augmentation 7/	BPA	---	---	---	---	---	---	---
Reduced Forebay Levels	BPA	---	---	---	---	---	---	---
ESA - NMFS Fund (Add. Spill for Juvenile Passage)	BPA	---	---	---	---	---	---	---
Subtotal		---	---	---	---	---	---	---
REIMBURSABLE (ASSOC. PROJECTS - FEDERAL HYDRO)								
O&M Lower Snake River Hatcheries	USFWS	5.4	4.9	5.8	5.1	7.6	8.3	37.1
O&M Corps (w/bypass eff. FY 1992)	COE	11.4	15.8	20.7	10.5	12.3	11.5	82.2
O&M Bureau (hatchery eff. FY 1992)	BOR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other (NW Power Planning Council)	BPA	3.1	3.0	3.2	3.4	3.7	3.6	20.0
Subtotal		19.9	23.7	29.7	19.0	23.6	23.4	139.3
TOTAL PROGRAM OPERATING EXPENSES		52.8	117.3	62.9	77.8	96.6	96.2	493.6
PROGRAM RELATED FIXED EXPENSES 9/								
Interest Expense	BPA	15.3	17.1	22.2	24.3	24.5	26.0	129.4
Amortization Expense	BPA	0.1	0.5	0.8	1.1	1.7	2.4	6.6
Depreciation Expense	BPA	4.3	4.5	5.5	5.6	5.7	5.9	31.5
TOTAL PROGRAM FIXED EXPENSES		19.7	22.1	28.5	31	31.9	34.3	167.5
GRAND TOTAL PROGRAM EXPENSES		72.5	139.4	91.4	108.8	128.5	130.5	661.1
FOREGONE REVENUES THRU FY 1993								
Spill (at Federal dams)	BPA	27.0	19.0	9.0	10.0	15.0	15.0	95.0
ESA Drawdown - Minimum Operating Pool 10/	BPA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		27.0	19.0	9.0	10.0	15.0	15.0	95.0
FOREGONE REVENUES FY 1994 5/								
U. Columbia River Water Budget	BPA	---	---	---	---	---	---	---
Spill for Juvenile Passage 6/	BPA	---	---	---	---	---	---	---
Flow Augmentation	BPA	---	---	---	---	---	---	---
Reduced Forebay Levels 10/	BPA	---	---	---	---	---	---	---
ESA - NMFS Fund (Add. Spill for Juvenile Passage)	BPA	---	---	---	---	---	---	---
Subtotal		---	---	---	---	---	---	---
TOTAL - PROGRAM EXP. & FOREGONE REVENUES		99.5	158.4	100.4	118.8	133.5	145.5	756.1

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THIS TABLE.

FISH AND WILDLIFE CROSSCUT

(dollars in millions)

	First						Subtotal	TABLE 3
	Funded by:	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995	FY 81-85	TOTAL 78-95
CAPITAL INVESTMENTS								
BPA Fish and Wildlife 1/	BPA	17.7	11.2	17.3	20.5	32.5	99.2	154.3
Associated Projects (Federal Hydro) 2/	COE	12.0	4.7	162.0	63.0	48.0	289.7	614.9
TOTAL CAPITAL INVESTMENTS		29.7	15.9	179.3	183.5	80.5	388.9	769.2
PROGRAM OPERATING EXPENSES								
BPA DIRECT FISH AND WILDLIFE PROGRAM 1/								
Non-ESA Activities	BPA	32.7	59.4	30.0	43.5	47.7	213.3	383.6
ESA Activities	BPA	0.3	7.6	19.6	12.4	23.7	63.6	63.6
Subtotal		33.0	67.0	49.6	55.9	71.4	276.9	447.1
BPA PWR. PURCH. FOR FISH ENHANCE. (NET) THRU FY 1993								
Existing Water Budget 3/	BPA	40.0	40.0	40.0	0.0	0.0	120.0	354
ESA Implementation 4/	BPA	0.0	19.0	64.0	0.0	0.0	83.0	83
Subtotal		40.0	59.0	104.0	0.0	0.0	203.0	437.0
BPA PWR. PURCH. FOR FISH ENHANCE. (NET) EFF. FY 1994 5/								
U. Columbia River Water Budget	BPA	—	—	—	40.0	0.0	—	—
Spill for Juvenile/Adult Passage 6/	BPA	—	—	—	5.7	0.0	—	—
Flow Augmentation 7/	BPA	—	—	—	66.0	0.0	—	—
Reduced Forebay Levels	BPA	—	—	—	0.0	0.0	—	—
ESA - NMFS Fund (Add. Spill for Juvenile Passage)	BPA	—	—	—	0.0	0.0	—	—
Subtotal					111.7	114.0	225.7	225.7
REIMBURSABLE (ASSOC. PROJECTS - FEDERAL HYDRO)								
O&M Lower Snake River Hatcheries	USFWS	8.7	11.2	11.2	12.4	12.7	56.2	100.6
O&M Corps (w/bypass eff. FY 1992)	COE	11.8	13.3	14.0	16.9	17.8	73.8	203.1
O&M Bureau (hatchery eff. FY 1992)	BOR	0.0	0.0	1.2	1.3	1.3	3.8	3.8
Other (NW Power Planning Council)	BPA	3.8	3.9	4.1	4.3	4.3	20.4	48.8
Subtotal		24.3	28.4	30.5	34.9	36.1	154.2	356.3
TOTAL PROGRAM OPERATING EXPENSES		97.3	154.4	184.1	202.5	221.5	859.8	1466.1
PROGRAM RELATED FIXED EXPENSES 9/								
Interest Expense	BPA	29.2	31.4	40.6	46.1	44.9	182.2	377
Amortization Expense	BPA	3.6	4.8	5.5	6.8	8.5	29.2	35.8
Depreciation Expense	BPA	5.4	5.7	7.5	8.4	10.2	37.2	91
TOTAL PROGRAM FIXED EXPENSES		38.2	41.9	53.6	61.3	63.6	258.6	503.8
GRAND TOTAL PROGRAM EXPENSES		135.5	196.3	237.7	263.8	285.1	1118.4	1969.9
FOREGONE REVENUES THRU FY 1993								
Spill (at Federal dams)	BPA	15.0	15.0	20.0	—	—	50.0	171
ESA Drawdown - Minimum Operating Pool 10/	BPA	0.0	8.0	25.0	—	—	33.0	33
Subtotal		15.0	23.0	45.0	0.0	0.0	83.0	204.0
FOREGONE REVENUES FY 1994 5/								
U. Columbia River Water Budget	BPA	—	—	—	0.0	—	—	0.0
Spill for Juvenile Passage 6/	BPA	—	—	—	32.0	—	—	0.0
Flow Augmentation	BPA	—	—	—	0.0	—	—	0.0
Reduced Forebay Levels 10/	BPA	—	—	—	25.0	—	—	0.0
ESA - NMFS Fund (Add. Spill for Juvenile Passage)	BPA	—	—	—	5.0	—	—	0.0
Subtotal					62.0	114.0	178.0	176.0
TOTAL - PROGRAM EXP. & FOREGONE REVENUES		150.5	219.3	282.7	325.8	399.1	1377.4	2349.9

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THIS TABLE.

**DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION**

**Notes - Fish and Wildlife Investments Crosscut Tables
Fiscal Years 1978 through 1995**

These notes support three tables that display the Pacific Northwest electric utility ratepayers' investment in fish and wildlife activities within the Columbia River Basin. The tables represent the annual expense for all fish and wildlife investments funded under the Federal Columbia River Power System from a rate making, revenue requirement perspective for the period Fiscal Years (FY) 1978 to 1995. Where audited actuals are not available in this period, best estimates are used. The three tables cover the following periods: Table 1 - FY 1978 through FY 1984, Table 2 - FY 1985 through FY 1990, and Table 3 - FY 1991 through FY 1995.

The costs shown in the tables are based on budget outlays (rather than obligations) for the year shown. The title "Capital Investments," shown at the top of the table, is presented for information only. The annual expense (interest, amortization, and depreciation) associated with these capital investments is shown under the title "Program Related Fixed Expenses."

BPA has a mandate, under the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act), to undertake activities to enhance and support fish and wildlife resources adversely affected by the hydroelectric development of the Columbia River Basin. Under the Act, the Northwest Power Planning Council has established a fish and wildlife program that oversees regional efforts to improve fish and wildlife survival. In conjunction with the Power Planning Council, affected states within the BPA service area, public agencies and Indian tribes, BPA identifies opportunities for effective actions to restore habitat and support fish and wildlife population, and provides funding for those activities.

BPA also has a mandate to implement measures called for under the Endangered Species Act. These measures are part of the Biological Opinions (BO) issued by the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) regarding the operations of the Federal Columbia River hydro electric system. The expenses associated with the calendar year (CY) 1995 NMFS BO, addressing measures regarding listed salmon species, and the CY 1995 USFWS BO, addressing measures concerning Kootenai River sturgeon and certain Snake River snails, are reflected in the tables.

BPA funding of the Power Planning Council's Fish and Wildlife Program measures and measures called for under ESA, starting in FY 1992, has increasingly become interrelated and as such, difficult to separately track. As a result, the ESA activities reported under the heading "BPA Direct Fish and Wildlife Program" will no longer be separated in forecasts that extend beyond the budget year.

BPA has a direct program "budget" that is the source of funding the Council's Fish and Wildlife Program and certain ESA measures called for in Biological Opinions. This budget is reflected in these tables under two headings. The first is under "Capital Investments" for fish and wildlife, and the second is under "Program Operating Expenses" for BPA fish and wildlife program. (Because these tables present a "revenue requirement" view of BPA's overall fish and wildlife annual investment, only the fixed expenses of the capital investment are included in the total, as noted above.)

Adjustments for implementation of Section 4(h)(10)(C) of the Northwest Power Act for FY 1994 and FY 1995 are \$18.7 million and \$56.3 million, respectively, are not reflected in Table 3. The Section 4(h)(10)(C) credits were received against BPA's FY 1994 and FY 1995 Treasury repayment. The credit reflects implementation of Section 4(h)(10)(C) which calls for a portion of BPA's fish and wildlife expenses to be allocated to the other purposes of the Federal projects in the Columbia River Basin. Analysis has determined that the BPA's power share is 73 percent and the taxpayer's share is 27 percent.

- The tables represent a "revenue requirement" view of BPA's fish and wildlife funding responsibilities except for foregone revenues. All expenses in these tables are paid for by BPA's ratepayers.
- Power purchases and foregone revenues for FY 1994 reflect the measures contained in the CY 1994 National Marine Fisheries Service's (NMFS) Biological Opinion issued March 16, 1994, pursuant to the Endangered Species Act (ESA). Estimates for FY 1995 reflect the average of 50 water year conditions and reflect the measures contained in the NMFS Biological Opinion issued March 2, 1995, pursuant to ESA. The estimated expenses for FY 1995 are split 50/50 between power purchases and foregone revenues. A detailed accounting

of FY 1995 expenses is not complete at this writing but should be included in later updates to Table 3. A format change in the display of the Power Purchases for Fish Enhancement and Foregone Revenues occurs starting in FY 1994 to better reflect NMFS Biological Opinion elements.

Footnotes

- 1/ Based on outlays. The BPA Program Expenses - ESA for the period FY 1991 through FY 1995 reflect funding specifically mandated by ESA and also those expenditures that, while not specifically mandated, are intended to assist in the recovery of ESA-listed species. Examples of these projects are the squawfish predator control program and the Kootanai River sturgeon program.
- 2/ Based on plant-in-service as reported by the Corps of Engineers. Through FY 1977, cumulative plant-in-service is estimated at \$165 million. A review of these annual estimates is planned and may result in restatements of annual plant-in-service and resulting adjustments in Program Related Fixed Expenses.
- 3/ Expenses through FY 1991 are for Water Budget only. ESA implementation began in FY 1992 in anticipation of NMFS listings that led to a Biological Opinion that was issued in calendar year (CY) 1993.
- 4/ In FY 1993, estimates reflect the CY 1993 NMFS Biological Opinion.
- 5/ The FY 1994 estimates reflect the measures contained in the 1994 NMFS Biological Opinion issued March 16, 1994. Estimates for FY 1995 reflect NMFS Biological Opinion issued March 2, 1995, and are the average of 50 water year conditions. As noted above, accounting is not complete on FY 1995 hydro operations. Effective in FY 1994, these expenses are displayed with greater detail, consistent with categories identified by NMFS in the Biological Opinion.
- 6/ The estimate for FY 1994 reflects CY 1994 NMFS Biological Opinion spill levels April 10, 1994, through the migration period. It also reflects emergency spill measures implemented by NMFS May 11, 1994 through June 20, 1994.
- 7/ The estimate for FY 1994 reflects CY 1994 NMFS Biological Opinion flow augmentation volumes plus the additional releases from Dworshak (to elevation 1490 feet) and Upper Columbia reservoirs (1.33 MAF).
- 8/ Associated Projects costs reflect the power share of the fish and wildlife O&M reimbursed to the Treasury. The amounts shown are based on estimates of the agency, adjusted for actuals by BPA where data is available. (Prior versions of these tables included a line representing estimates for "ESA" related expenses for FY's 1992 and 1993. This sub-category has been removed because expenses are not separately reported to Bonneville, although ESA expenses are assumed to be imbedded in the expenses of the Federal agencies [excluding the Council which has no ESA related expenses.]
- 9/ Interest expense includes BPA's interest on bonds (for fish and wildlife) and interest on the Corps of Engineers (Federal) investment in fish and wildlife assigned to the power purposes of the Federal projects. Amortization reflects BPA's bonds and depreciation reflects the Federal investment in fish and wildlife. These amounts include expenses for interest during construction on federal investments.
- 10/ "ESA drawdown" includes operations of the four Lower Snake River dams at near minimum operating pool elevations and John Day Dam at minimum irrigation pool, as in 1992. Other drawdown proposals being studied include physical changes to the Lower Snake River dams. These proposals would result in significantly higher costs and are not included in either the ESA drawdown or reduced forebay levels in these tables.

3/6/96

dmb:230-3171 (ECB-SB31D1)

PROGRAM & FINANCING SUMMARY

Current Services
(in millions of dollars)

Identification Code: 89-4045-0-3-271

	Actuals 6/		est.				
	2001	2002	2003	2004	2005	2006	2007
Program by activities:							
Operating expenses:							
0.01 Power Business Line	2,981	1,876	1,685	1,650	1,672	1,651	1,660
0.02 Residential Exchange	68	144	144	144	144	144	144
Associated Project Costs:							
0.05 Bureau of Reclamation	54	57	59	61	63	65	67
0.06 Corps of Engineers	117	117	125	128	131	134	139
0.07 Colville Settlement	20	20	23	23	23	23	24
0.19 U.S. Fish & Wildlife Service	4	15	16	17	18	19	20
0.20 Planning Council	7	8	8	8	8	8	8
0.21 Fish & Wildlife	103	150	150	150	150	150	150
0.23 Transmission Business Line	216	296	291	295	301	306	311
0.24 Conservation & Energy Efficiency	31	35	35	34	32	32	31
0.25 Interest	452	442	459	491	517	533	545
0.26 Pension and Health Benefits 1/	8	39	18	12	8	5	2
0.91 Total operating expenses 2/	4,061	3,199	3,013	3,013	3,067	3,070	3,101
Capital investment:							
1.01 Power Business Line	65	105	117	99	39	30	32
1.02 Transmission Services	183	300	406	421	132	69	58
1.03 Conservation & Energy Efficiency	0	26	42	51	23	20	9
1.04 Fish & Wildlife	17	35	38	30	10	7	8
1.05 Capital Equipment	17	26	25	22	7	3	3
1.06 Capitalized Bond Premiums	0	2	3	3	1	1	1
1.91 Total Capital Investment 3/	282	494	631	626	212	130	111
2.01 Projects Funded in Advanced	18	25	25	25	25	25	25
10.00 Total obligations	4361	3,718	3,669	3,664	3,304	3,225	3,237

1/ See Interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of Pension & Post-retirement Benefits cost estimates and the impact of proposed legislative funding.

2/ Reflects expense obligations, not accrued expenses.

3/ Reflects capital obligations, not capital expenditures.

Updated capital estimates for FYs 2002 through 2003, are based on estimates from both the power and transmission rate cases. These estimates reflect planned infrastructure investments designed to address the long-term needs of the region. Capital estimates for FYs 2004 and beyond reflect reductions assumed from expected program levels, in order to produce estimates that do not exceed Bonneville's current borrowing authority of \$3.75 billion. These outyear estimates reflect the amount of Treasury financing which could be used under the existing \$3.75 billion cap and do not reflect BPA program authority.

Program and Financing (continued)

Current Services
(in millions of dollars)

	est.						
	2001	2002	2003	2004	2005	2006	2007
Financing:							
21.90 Unobligated balance available, start of year: Treasury balance 3/	(977)	(734)	(800)	(800)	(800)	(800)	(800)
24.40 Unobligated balance available, end of year: Treasury balance 3/	800	800	800	800	800	800	800
25.00 Unobligated balance lapsing	0	0	0	0	0	0	0
39.00 Budget authority (gross)	4,148	3,784	3,669	3,665	3,304	3,225	3,237
Budget Authority:							
67.15 Permanent Authority: Authority to borrow (indefinite) 4/	260	251	228	222	304	237	161
69.00 Spending authority from off-setting collections	4,027	3,770	3,688	3,851	3,475	3,425	3,425
69.47 Portion applied to debt reduction 5/	(139)	(237)	(247)	(408)	(475)	(437)	(349)
69.90 Spending authority from offsetting collections (adjusted)	3,888	3,533	3,441	3,443	3,000	2,988	3,076
Relation of obligations to outlays:							
71.00 Total obligations	4,364	3,718	3,669	3,664	3,304	3,225	3,237
Obligated balance, start of year:							
72.47 Authority to borrow	197	197	197	197	197	197	197
74.47 Authority to borrow	(197)	(197)	(197)	(197)	(197)	(197)	(197)
87.00 Outlays (gross)	4,364	3,718	3,669	3,664	3,304	3,225	3,237
Adjustments to budget authority and outlays:							
Deductions for offsetting collections:							
88.00 Federal funds	(90)	(90)	(90)	(90)	(90)	(90)	(90)
88.40 Non-Federal sources	(3,937)	(3,680)	(3,598)	(3,761)	(3,385)	(3,335)	(3,335)
88.90 Total, offsetting collections	(4,027)	(3,770)	(3,688)	(3,851)	(3,475)	(3,425)	(3,425)
89.00 Budget authority (net)	121	14	(19)	(187)	(171)	(200)	(188)
90.00 Outlays (net) 6/	337	(52)	(19)	(187)	(171)	(200)	(188)

3/ Treasury balance and unobligated balance estimates assume that BPA will borrow the amount needed to finance the full capital program. Actual Treasury borrowing and cash balances will be different, depending on net revenues, Treasury interest rates, and other cash management factors. Borrowing could be higher such that cash balances at the end of each year could equal total reserves.

4/ The Permanent Authority: Authority to borrow (indefinite) amounts reflect both BPA's capital program financing needs and either the use of, or creation of, deferred borrowing. Deferred borrowing is created when, as a cash and debt management decision, BPA uses cash from revenues to liquidate capital obligations in lieu of borrowing. This temporary use of cash on hand instead of borrowed funds creates the ability in future years to borrow money, when fiscally prudent. Technical Executive Branch budget display and tracking requirements have modified the way BPA shows this deferred borrowing as a resource carried forward from year-to-year. This amount must therefore be added to, or subtracted from, BPA's current year borrowing authority amount, making this number a combination of capital program financing needs and the annual use, or creation of deferred borrowing. The FY 1989 Energy and Water Development Appropriations Act (P.L. 100-371 of 7/19/88) clarified that BPA has authority to incur obligations in excess of borrowing authority and cash in the BPA Fund. The two amounts which comprise the net amount on line 67.15 above are as follows:

Borrowing Authority:

to finance capital obligations

to finance other obligations

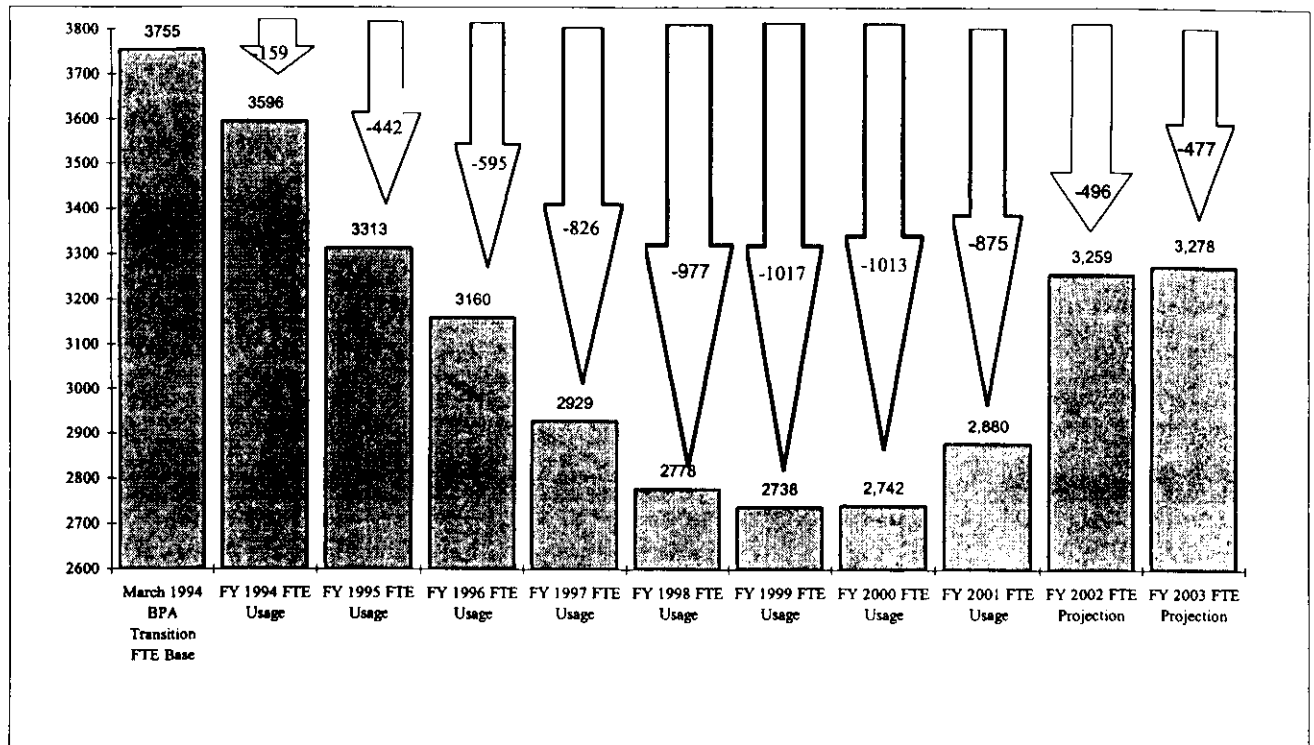
Total Borrowing Authority (67.15)

FISCAL YEAR						
2001	2002	2003	2004	2005	2006	2007
259	493	631	626	212	130	111
1	(242)	(403)	(404)	92	107	50
260	251	228	222	304	237	161

5/ Includes amortization of BPA and Corps of Engineers appropriations and amortization of BPA bonds. Line 69.47 is referred to as capital transfers on BP-3.

6/ FY 2001 reflects unaudited actuals. For a reconciliation to audited actuals, refer to DOE's audited FY 2001 Financial Statements. The Net Outlays reflected in this budget are the same as those reflected in the DOE audited financial statements.

BONNEVILLE FTE
(Revised January 2002)



BPA's March 1994 baseline for FY 1994 was the number of filled positions (permanent and temporary, full and part-time, including student programs charged against FTE allocations) whose incumbents were actually on board and charging against BPA FTE. BPA identified this as baselines for both employment and FTE.

BPA has utilized the following number of Voluntary Separation Incentives (VSIs): 190 in FY 1994, 240 in FY 1995, 137 in FY 1996, 135 in FY 1997, 121 in FY 1998, 81 in FY 1999, 43 in FY 2000, and 12 in FY 2001.

As part of its strategic staffing efforts and infrastructure project requirements, Bonneville has identified a need for an increase in current FTE levels. This increase is designed in part to accommodate a shift in critical skills needed to meet the demands of succeeding in a deregulated energy market.

Bonneville Power Administration

PO Box 3621 Portland, Oregon 97208-3621

DOE/BP - 3424 February 2002 75





Department of Energy
Washington, DC 20585

RECEIVED BY BPA ADMINISTRATOR'S OFC-LOG #: 01-0621
RECEIPT DATE: 11-06-01
DUE DATE: 11-15-01

Memorandum For: Stephen J. Wright
Acting Administrator
Bonneville Power Administration

ASSIGN: DF-2

From: Bruce M. Carnes
Director
Office of Management, Budget And Evaluation/CFO

cc: A-7, D-7, KN/Wash, T/Ditt2, TM/Dit
Mary Hawken-DFE-2, Bart Evans-KR-7

Date: November 5, 2001

Subject: OMB Request for Information

As part of the Administration's FY 2003 budget review process, the Office of Management and Budget (OMB) is evaluating Bonneville Power Administration's (BPA's) proposal to increase its borrowing authority. OMB feels they do not have sufficient information to determine whether the Government should allow additional debt to BPA and requests several items.

Mr. Marcus Peacock, OMB Associate Director for Natural Resource Programs, has officially requested DOE to provide the underlying data for the "Borrowing Authority to Support Infrastructure Investments" graph on page 39 of the Capital and Financing Requirements briefing that was presented to OMB on June 7, 2001 (see attached copy). Specifically, OMB wants to know what projects BPA expects to fund with its current authority and which projects it would fund with the additional authority. With the exception of the G-1 through G-9 transmission projects, OMB feels they have received little justification of the need for most of the projects. They need this information to understand the projects BPA proposes to fund and identify whether and how much of this authority is necessary now or could be postponed in favor of higher priority programs.

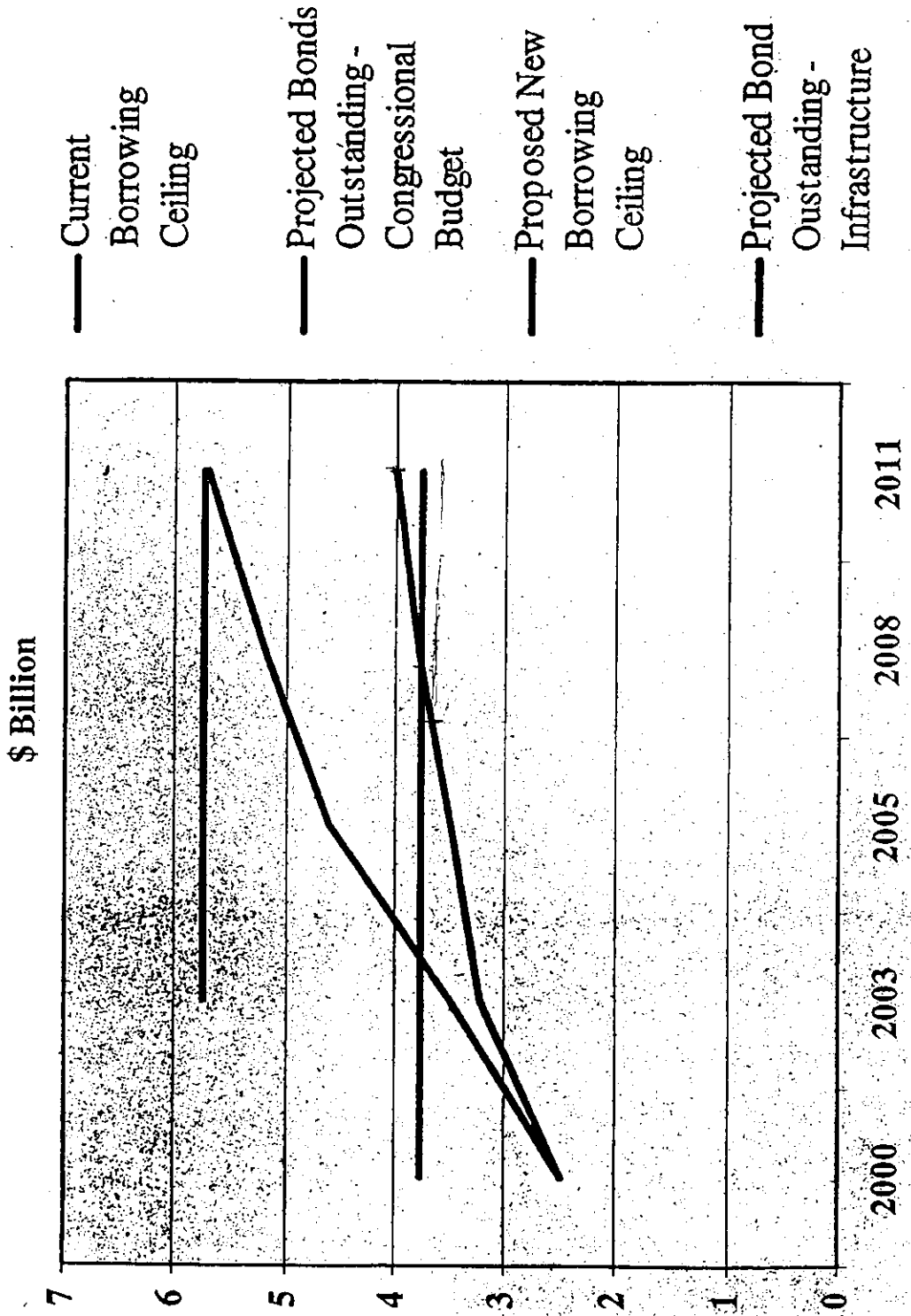
In addition, OMB has requested a general report on BPA's fiber optic cable investments. They believe that BPA is competing in the near-term with a number of private communications companies. Specifically, they want to know how much of the fiber is currently leased, how much is available for lease, and whether the program is meeting reasonable financial goals since it is currently being operated, in part, as a commercial venture.

Please provide information on these two items to the Office of Budget, as soon as possible, but no later than November 15, 2001. If you have any questions, please contact me or have your staff contact Ms. Gale Kabat, Office of Budget, on 202 586-2469.

Enclosure



Borrowing Authority to Support Infrastructure Investments



United States Government

Department of Energy
Bonneville Power Administration

memorandum

DATE: NOV 14 2001

REPLY TO
ATTN OF: DFF-2

SUBJECT: Information: OMB Request for Information

TO: Dr. Bruce M. Carnes, Chief Financial Officer – U. S. Department of Energy

Attached are the materials Office of Management and Budget (OMB) requests. Bonneville Power Administration (Bonneville) believes it has already provided OMB with sufficient information to justify the request for additional borrowing authority. The materials include the capital investment data underlying the "Borrowing Authority to Support Infrastructure Investments" chart that was part of the presentation to OMB on June 7, 2001, as well as other requested supporting materials. In addition, a report on Bonneville's fiber-optic cable plan with a current status report is included. The information provided is in support of the Department of Energy's (DOE) FY 2003 budget request, which includes the request for \$2 billion in additional borrowing authority for Bonneville.

Background: Bonneville has broad statutory and contractual responsibilities to assure transmission and power reliability in the Pacific Northwest. As part of these responsibilities, Bonneville is requesting an increased limit on borrowing authority so that it can initiate long-term capital designed to remedy regional and West Coast power system constraints. These critical infrastructure initiatives are required now to help meet the region's long-term power and transmission infrastructure needs and assure multi-year planning certainty.

Bonneville's proposal for increased borrowing authority is consistent with the National Energy Policy as submitted to the President on May 16, 2001 in the following areas: Transmission in Chapter 7: "America's Energy Infrastructure - A Comprehensive Delivery System"; Power in Chapter 5: "Energy for New Century- Increasing Domestic Energy Supplies"; Conservation and Energy Efficiency in Chapter 4: "Using Energy Wisely - Increasing Energy Conservation and Efficiency"; and Chapter 6: "Nature's Power - Increasing America's Use of Renewable and Alternative Energy".

Summary of Attachments:

Attachment 1: Overview of Bonneville practices regarding borrowing authority and Bonneville's Capital Budgeting Process

Attachment 2: Budget data supporting Bonneville's request for increased borrowing authority

- Summary Capital Investment Data for FYs 2001-2011
- FY 2002 Congressional Budget Capital Investments
- FY 2003 OMB Budget Capital Investments

Attachment 3: FY2003 OMB budget data: Transmission Project Detail

Attachment 4: FY2003 OMB budget data: Hydro and Conservation Project Detail

Attachment 5: Infrastructure Project Detail: Transmission (1)

Attachment 6: Infrastructure Project Detail: Transmission (2)

Attachment 7: Infrastructure Benefits Summary

Attachment 8: A Proposal for the Northwest's Long-Term Power Solution Investments in Infrastructure, July 2001: including transmission, power and conservation infrastructure data and business case

Attachment 9: DOE staff memo on material submitted regarding Bonneville Capital and Financing Requirements

Attachment 10: Bonneville Fiber-Optic Cable Plan, March 2000

Attachment 11: Status Paper on Bonneville's Fiber-Optic Cable Plan, November 2001

If you have any questions or need further clarification on the information we have provided, please feel free to call me at (503) 230-5105, Jim Curtis at (503) 230-5111, or Roger Seifert in our Washington, DC Office at (202) 586-5640.



Stephen J. Wright
Acting Administrator and
Chief Executive Officer

Attachments (11)

cc:

R. Aiken S-1

bcc:

ECC – D-7 (01-0621)

S. Sanford – DFF-2

R. Fox – PGF-6

J. Curtis – DF-2

J. Stier – KN/WASH

R. Lahmann – TM-Ditt2

M. Hawken – DFF-2

R. Roach – L-7

M. Federovitch – TMF-MODD

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(the date)

The Honorable Marcus Peacock
Associate Director
Natural Resources Program
Office of Management and Budget
17th Street and Pennsylvania Avenue, NW
Room 260
Washington, DC 20503

Dear Mr. Peacock:

In response to your recent letter regarding Bonneville Power Administration (Bonneville's) request for additional borrowing authority, I am forwarding to you a memo on this subject from Stephen Wright, Acting Administrator for Bonneville. The attachments included in the memo support the Department of Energy (DOE's) FY 2003 budget request, which includes the request for \$2 billion in additional borrowing authority for Bonneville and also Bonneville's fiber-optic plan.

If you have any questions or need further clarification on the information provided, please feel free to call me at (202) 586-4171. If you have questions best addressed by Bonneville staff, please feel free to contact Roger Seifert in Bonneville's Washington, DC Office at (202) 586-5640.

Sincerely,

Bruce M. Carnes
Chief Financial Officer

Enclosures (11)

Summary of Attachments in response to DOE memo on OMB Request for Information (Nov. 5, 2001):

The underlying data for the "Borrowing Authority to Support Infrastructure Investments" graph is found in Attachments 2, 3 and 4. Information requested that is specific to what projects BPA expects to fund with its current authority and which projects it expects to fund with additional authority is discussed in Attachment 1. Project detail and justification of need for specific projects is found in Attachments 4,5,6,7 and 8. A list of previously submitted materials to OMB is found in Attachment 9. A general report on fiber is found in Attachment 10. A discussion of BPA's current fiber activities is found in Attachment 11.

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Attachment 1

BPA's Capital Budget Process

Introduction

The following report describes the process BPA uses in developing its capital budget. Proposed capital projects are reviewed and evaluated based on the process described below. Since BPA operates in a dynamic market place, capital projects are subject to change as conditions change. As a customer-focused organization BPA, as it has in the past, will work with customers and the public in assessing how best to address changing conditions.

The capital budgeting process does not address how BPA will finance new capital additions. BPA's borrowing decisions as to timing are based upon cash needs. The funding of capital projects is based on a first in, first out approach. Specific projects are not linked to specific bonds.

BPA monitors the cash needs for five programs. BPA uses its cash to initially fund capital projects and borrows when expenditures in any one of these five areas reaches material levels. The five areas are construction, conservation, environment, fish and wildlife, and direct funding of Corps of Engineers and Bureau of Reclamation capital projects. These programmatic categories are linked to the purposes for which BPA has the authority to issue bonds. The BPA Administrator may issue bonds to fund construction, acquisition, and replacement of the transmission system, and to provide assistance for conservation, renewable resources and fish and wildlife. Federal Columbia River Transmission Act of 1974 (as amended by the Northwest Power Act).

A Revised Capital Investment Review

Process:

FY 2001 Implementation

**Final
May 11, 1999**

Capital Budgeting Team

Bryan Crawford - Lead, PM&F

Margo Chang – PM&F

Steve Dunne – PM&F

Chuck Maichel - PBL

James Meyer - F&W/Environment

Audrey Perino- PBL

Madonna Radcliff – PM&F

Randy Russell – PM&F

Brenda Weller - TBL

Erik Westman - TBL

Introduction

A well-managed enterprise has a strong alignment between its core mission and daily operations. Unless key strategic business objectives permeate the managerial decisions at every level, the firm will not thrive. There are few managerial decisions more important for the long-term viability of the firm than the selection and management of physical assets. In many ways, the choice of which investments to make, as outlined in the investment strategy, is the clearest embodiment of the firm's overall strategy. This is especially true in an industry as capital intensive as the electric power industry.

While private sector firms may be in very different businesses, they share the common purpose of increasing shareholder value. Successful private sector firms have adopted capital strategies that seek the best return on their assets consistent with their overall business direction. This return on assets is measured by cash flows. New capital investment, disinvestment, and divestiture opportunities are selected based on their capability to add to the net present value of cashflows on the asset base.

As a government enterprise in a competitive market, BPA and the other agencies of the FCRPS have three primary objectives which must be carefully balanced: 1) providing competitive rates for power and transmission products and services, 2) maintaining an acceptable probability of making Treasury payments, and 3) providing an appropriate level of public benefits. To achieve these objectives, the agencies must seek the highest possible return on existing assets and acquire new assets that enhance the level of monetary returns.

The FCRPS invests in both revenue-producing and non-revenue producing (public benefit) assets. The agencies of the FCRPS must choose and manage assets such that the financial success of the revenue producing assets is sufficient to not only recover the costs of those assets, but also recover the costs of the non-revenue producing assets. ***BPA's competitiveness and ability to recover FCRPS costs, including timely repayment of the Federal investment, is fundamentally a function of financial returns on investments in revenue producing assets and on effective, lowest-possible-cost non-revenue producing assets.***

To increase the value of the business, BPA must maximize the value of the FCRPS in order to provide for public benefits through:

- Rigorous identification and evaluation of new economic and public benefit investments, disinvestments, and divestiture opportunities
- Design and marketing of power and transmission products
- Minimizing the expenses of asset operations and maintenance
- Setting rates that balance the generation of funds needed for public benefit investments and expenses with the implicit public benefit of prices below market.

The new capital investment review process outlined in this proposal directly addresses an improved method for rigorously identifying and evaluating new investment opportunities. The selection of new investments that provide the greatest possible returns commensurate with market risks will maximize the funds available to provide public

benefits, whether they come in the form of direct investments/expenses or rates below market.

This new process will operate within the framework of BPA's Strategic Objectives, business line strategic plans, the Financial Strategy, and financial targets as established in annual and multiyear flight plans (net revenue targets, expense and revenue targets, and investment performance targets, such as AEV targets).

Section 1: The Revised Capital Investment Review Process – Context and Objectives

In recent years, Bonneville has visited the topic of capital budgeting several times, with mixed success. This revised process builds upon these prior efforts, and in many ways can be seen as the culmination of the techniques, ideas and insights gained from previous capital budgeting processes. In addition to past experience, this revised process benefits from insights gained from the Cost Review, the Tenaska litigation, and from benchmarking of utility and non-utility industry leaders.

This proposal is a direct response to one of the principle recommendations of the recent FCRPS Cost Review, completed in March 1998. Recommendation #6 of the Cost Review calls for a consolidated, integrated capital asset strategy for the FCRPS. This proposal addresses two aspects of the recommended capital asset strategy: a coordinated investment process to rigorously analyze investment opportunities that maximize asset value and the establishment of FCRPS-wide performance targets and accountabilities. Separate processes are currently underway to address other aspects of the recommendation, including O&M benchmarking, identification of asset status and investment needs, and potential divestiture of assets.

This process is also being developed in concert with the current development of a Bonneville Financial Strategy. The Financial Strategy covers risk mitigation, capital financing, cash management and other financial topics in addition to capital investment guidance. Full implementation of the proposed capital investment review process will be concurrent with implementation of the Financial Strategy, set for FY 2001.

For FY 2000, this proposal outlines a transition towards the new capital investment review process. The FY 2000 capital investment review process will focus on:

- defining essential top management strategic guidance;
- establishing the method for determining overall capital investment levels and capital allocations to business lines and corporate based on BPA's strategic direction and capital availability. This will result in a final allocation of capital for FY 2000, and borrowing authority requirements for FY 2001-2006;
- creating common analytical standards, including the use of financial and non-financial criteria within a multi-attribute decisionmaking framework;
- establishing the format and methodology for capital budget review within the business lines;
- and outlining the requirements for performance targets and measurement.

For the FY 2001 budget process, full implementation of the capital investment review process will include:

- translating top management strategic guidance into business line specific capital asset targets, with accompanying performance targets;
- in concert with the business lines, developing and implementing (including necessary software and training) the analytical techniques and procedures necessary to support the common analytical standards;

- chartering and staffing business line capital investment review panels to select projects for FY 2001;
- setting performance targets for each capital project, with accompanying methodology and schedules for measurement;
- working with the BSP to develop the capital investment cost and revenue tracking necessary to support performance targets and measurement;
- and establishing a schedule and method for evaluation of the capital investment review process geared towards continual process improvement.

Key Objectives/Goals of the Capital Investment Review Process

In developing this proposed process, the capital budgeting team set the following key objectives/goals:

- The capital investment review process will employ a framework using multi-attribute decision making for approving long-term commitments of scarce capital resources (borrowing and future revenues)
- The revised process will have clearly defined roles, responsibilities and timelines
- The analytical framework and guidelines result in consistent and comparable reviews of alternative capital investments or long-term expense commitments across the agency, while recognizing the unique character and requirements of the business lines
- The process emphasizes performance measurement, monitoring and accountability – with an understanding of how results will be compared to forecasts.
- The capital budget process development team provides clear guidance on the essential top management direction and commitment necessary to assure a successful capital investment review process.

The team will consider their work to be successful when:

- Business lines adopt the methodology, and it is used as outlined for FY 2001 capital budget decisions
- The process, with any necessary improvements, is also used for the FY 2002 capital decisions (it is deemed useful enough to last more than one year).

Section 2: Benchmarking: Lessons Learned

As part of this development effort, the capital budgeting team visited four utilities and one non-utility to gain insights into capital investment practices currently used by companies known for their success. In choosing which firms to approach for benchmarking, we relied on BPA staff recommendations as well as the advice of Stewart Meyers, an MIT professor renowned as a leading expert in financial management and analysis, and Larry Kolbe, a member of the Brattle Group (Stewart Meyers was a critical consultant and witness on BPA's behalf in the recent Tenaska litigation).

During discussions with TVA on debt management issues, we discovered that TVA had recently undergone a complete revision to their capital investment review methodology. TVA expressed a willingness to meet with us and share both their new process and the lessons learned in implementing it. While at TVA, we also had the opportunity of meeting with their debt management staff and their new risk manager.

As mentioned previously, this effort to revise BPA's investment review process is, in part, an outgrowth of a recommendation from the Cost Review. One of the outside industry experts on the Cost Review panel was Rosemary Mattick, the Vice-President for Procurement and Supply at Weyerhaeuser in Tacoma. On the Cost Review Panel, Rosemary was a strong advocate of the capital asset management recommendation, and offered her and Weyerhaeuser's assistance in implementing the recommendation. Weyerhaeuser also recently revised their capital investment review process. The capital budgeting team met with Rosemary and other senior Weyerhaeuser staff to discuss their new process and their experiences with its implementation.

Stewart Meyers and Larry Kolbe recommended the three other utilities BPA met with (Duke Energy, Southern Energy, and PG&E) as being examples of utilities with good track records of capital investment success.

We were received graciously and were able to hold free-ranging and frank discussions at all the firms we visited. Naturally, the private firms were less willing to discuss openly all of their practices, but overall, a strong sense of common purpose and professional comradeship allowed us to learn a great deal through our discussions.

As the following observations indicate, there was a great deal of commonality among the firms we visited on many aspects of capital investment review. These common traits and techniques help define current best practices in the industry that should be applied to the FCRPS when consistent with our mission and circumstances. The summary bullets shown below list the key observations/insights gained from our visits and have been loosely grouped to correspond to our recommendations. In italics, we have added a brief summary of how we propose to implement the best practices described.

We have available, for further reference, the full write-ups on our visits to each firm we benchmarked, with copies of material we received.

Common Observations/Insights

Top Management Guidance/Involvement

- All the firms visited stressed the importance of strategic direction in choosing projects that are not only financially sound but also fit into the long-term direction of the firm. The approach one firm adopted was particularly impressive. This firm's investment direction strategy directly addresses capital investments as an outgrowth of the business strategy of each business unit. It results in two-way performance contracts that outline the types of investments to be undertaken, with the financial and non-financial results expected. As individual investment opportunities arise, they are first checked against the contracts resulting from the strategy. This has been very effective in ensuring that all investments further the long and short-term business strategies of the firm.
- Three firms stressed the importance of top management discipline. Two redesigned their capital investment review processes in part to establish order and consistency in how capital projects were developed, proposed and approved. They pointed out that instituting the cultural change required by their new processes hinged on top management's commitment to the process and the clear understanding that all projects would need to use the new process (no back-door approvals outside the process).

This proposal includes a two step process for developing and conveying top management strategic direction that clearly conveys to business lines a strategic vision for the firm and clear performance expectations.

Earnings Expectations

- All four private firms use high-level earnings targets as the primary method of conveying earning expectations to business units. One gives each business unit targeted Earnings before Interest and Taxes (EBIT). Business units then propose the capital investments required to meet this target. Past use of EBIT has resulted in capital requests that were seen as too high. They are now investigating other measures, such as Economic Value Added (EVA), that do a better job factoring in the capital required to achieve earning. Another uses Return on Net Assets as their top-level target. The third currently uses an earnings target and is moving towards using EVA.

This proposal recommends that capital asset portfolio performance targets be set for business lines as part of the top management guidance at the front of the investment review process. Setting these targets should be the responsibility of the corporate strategic planning process. In setting performance targets, we would caution that, due to the public benefit of pricing below the market, revenue targets based only on BPA rates do not adequately measure asset productivity and could lead to confusion and less than optimal capital decisions.

Capital Limitations

- Each company sets annual capital investment amounts in different ways. One uses a 10-year financial plan with a debt ratio goal to set their annual capital investment amount. All four private firms take an economic approach, balancing the need for

capital funds with the resulting debt coverage ratios, credit rating, ability to issue stock, etc. Their determination of annual capital investment amounts is tied to their financial position and their ability to economically raise capital through borrowing and stock issuance.

The task of determining capital availability, and resulting annual capital investment amounts for the FCRPS, and BPA in particular, is more fully the responsibility of the Financial Strategy. This proposal presents our viewpoint on current capital levels and proposed a methodology for allocating capital between business lines.

Timing of Investment Review

- All the firms we talked to share a common process in which main investment decisions occur on an annual basis, with ongoing review of emerging projects. One approves actual projects annually; two others review annually, and approve as projects are presented. The fourth reviews on an annual basis with a mid-year check-in where new projects can be proposed as needed.

This proposal outlines an annual review process tied to operating year and Federal budget needs, with provision for review of opportunities that arise outside the annual process through use of an amount of capital set aside for emerging or emergency projects.

Clarity of Decision-Making

- Our benchmarking pointed out the need for clear decision-making – one person or group having a clear call to decide at each stage of a project, within a clear decision structure. One makes decisions using a committee structure of self-directed teams with business units nominating membership. The other three have delegated authority with single decision-makers, based on the magnitude of the project. One of those is unique in having one individual, the CFO, as the decision-maker for all capital budgets.
- *In our proposal, we seek to clearly establish roles and responsibilities based on clear performance expectations and the delegation of authority and accountability for those results. Our proposed process relies on business line capital investment review panels that create portfolios of capital projects for approval by the Business line Managing Committees.*

Analytical Standards

- All of the firms we visited use NPV as the primary financial decision tool. Several indicated that they also use IRR, net benefits and/or other measures to capture a broader picture of an investment and to increase comfort level of management and project proposers.
- The three private firms go directly to the market to develop discount rates for evaluation of proposed projects. They look for proxy companies that have the same level of uncertainty as their business lines, and determine the appropriate discount rate using the capital asset pricing and other cost of capital models. All three do this on a business line basis, and are attempting to make adjustments to discount rates where necessary to account for the increasing uncertainty due to the changing regulatory and market conditions.

- All firms benchmarked capture uncertainty, at least in part, through sensitivity analysis on key cost and revenue assumptions. They also universally require clear documentation of key assumptions and sensitivity runs.

Our benchmarking reaffirmed our previous decision (December 1998) to use NPV calculated using market-based discount rates as the primary financial criteria. Our concern with finding comparable industries in determining market rates was commonly held, without this concern undermining the decision to use market rates. This proposal also shares the best practice of using sensitivity analysis to capture project uncertainty (not adjustments to the discount rate).

Multi-Attribute Decisionmaking

- Three of the firms include point of delivery and reliability projects in the same review as new investments. These are not treated as “required”, but must go through the same economic test as other, more traditional revenue generating projects. Under one’s experience, this has rarely led to a project cancellation, but more often has resulted in delays until a project’s need was pressing.
- Two of the firms indicated that non-financial criteria enter into their decision-making through the performance standards set by the public utility commissions. In one jurisdiction, the commission is setting specific reliability and service standards with rewards and penalties. For other firm, meeting such standards is seen as an essential part of the regulatory compact. To violate the standards would result in losing the franchise to serve.

While the FCRPS may be rather unique in the level of our public benefits, we found that other firms faced similar challenges in balancing revenue producing and non-revenue producing investments. Our proposal to develop a multi-attribute decisionmaking process using financial and non-financial criteria is similar to that used by two of the benchmarked firms.

Miscellaneous

- The consensus on the capital budget horizon seems to be two to five years. One of the firms reviews three years, with the focus on the first year, and requests information on any large outlying costs in years 4-10. Another requests capital proposal on an annual basis. A third’s investment decision strategy process focuses on the next two years, with a lesser focus on the following three. The last firm reviews five years at time, tied to their rate setting process.
- Two of the firms require annual re-evaluation and approval of all multi-year projects; with costs-to-date treated as sunk. At one, one-year projects not completed within the year can be carried forward, provided funds are available in the budget.
- Two of the firms address the increasing uncertainty of the market and the impending end of the regulatory compact by requiring review of capital project on a shorter than full economic life. Both have set a maximum review period of 20 years, with shorter review periods when increased uncertainty requires it. One includes as a sensitivity the NPV using three shorter time horizons. The other indicated that they shorten the evaluation period in part because it is easier to explain to management and project sponsors than modifications to discount rates or other elements of the analysis.

- One firm stressed the need to control the timing and level of detail and specificity in capital investment analysis. Their system is set up to stage the amount of detail required based on what approval level a project is at. They have worked hard to discourage too much detail too early in the process, feeling that it stifles creativity and results in not exploring all the options available to achieve a given end. To reinforce this, they have a step in their capital investment review process that specifically directs that alternatives be brainstormed and given a preliminary examination.
- Two of the firms stressed the need for an explicit understanding of the difference between “required” investments (i.e. regulatory) and economic investments. They both established strict guidelines on qualifying for “required” status to overcome the natural inclination to classify as much as possible as “required”, to increase the likelihood of funding.
- One firm uses a staged process that analyzes less-discretionary investments before economic investments. This serves to establish the amount of available capital that must be used for required vs. what is available for economic investments. Another uses a similar, but less formal process, in that the CFO approves all budgets and thus keeps track of the level of economic vs. non-economic investments.
- Several of the firms visited pointed out the increased efficiency and effectiveness they have gained by getting finance people involved early in project development. They have worked diligently to create a partnership between finance and program staff such that financial staff were perceived to be problem-solvers. Early involvement was seen to be key to gaining the confidence and cooperation of all involved in project development and evaluation.
- One firm requires that all projects pass through their fixed asset group, ensuring proper categorization as capital before they are reviewed as such.
- Another firm has a very centralized capital budget review process where all activities are divided into about 50 programs. These programs are planned, budgeted, executed, and evaluated by program managers. Programs can contain both capital and expense elements, allowing a clear tradeoff between such activities as continued maintenance and replacements. Each program’s proposed budget is approved first by the applicable vice-president, and then by the CFO. Their process vests in the CFO the ultimate authority over setting criteria for, approving, monitoring, and measuring performance on all capital funds. As such, the CFO is responsible for assuring that capital investments are in accord with corporate strategy and are consistent with earnings and other financial and non-financial targets. Approval is granted through bi-annual meetings between program managers and the CFO.
- All of the firms we visited indicated that performance measurement was a challenge they were just beginning to address. All indicated that one approach they were now using was to require that performance targets be developed by project sponsors and build into proposals.
- One firm has experienced success in fostering a culture of cost control by setting up friendly competition between sub-units in the business lines. This type of competition has encouraged the development and dissemination of best practices within their company.
- At all the firms visited, the financing of projects was the responsibility of corporate.

- All of the benchmarked firms have a centralized process for developing and disseminating key financial and market assumptions. Committees led by corporate finance generally develop these assumptions.

Many of the insights in this broad miscellaneous category have also been incorporated in our proposal. Where applicable, we will indicated an idea's source in our recommendations.

Section 3: The Revised Capital Investment Review Process – Overview

The attached chart provides an overview of the annual budget review component of the proposed capital investment review process. Although capital investment opportunities arise throughout the year, the principle time at which capital investments are reviewed and approved occurs in conjunction with the annual Federal and operating year budget process. The proposed process is scheduled such that strategic investment direction is developed, and resulting capital investment portfolios are approved in time for implementation in operating year budgets (upcoming year) and inclusion in the Federal budget (establishing the borrowing authority request for outyears).

Caps on capital investment funding levels are set during the annual budget process and will only be increased under extraordinary circumstances. We propose that a portion be set aside within the capital allocations of both business lines and corporate that can be used to fund new opportunities and emergencies. Given the uncertainty in the industry, we propose we follow TVA's lead in requiring that multi-year projects be re-approved each year. This allows both funding levels and timing to be reassessed as part of each year's mix of capital opportunities.

For single-year projects not completed before year-end due to schedule changes, we propose that funds be carried over, provided funds remain in the budget to do so. With this limitation in mind, we also propose that business lines be allowed to re-prioritize during the year and use capital funds freed-up by budget under-runs or project changes.

As outlined in the attached chart, and elaborated in the remainder of this proposal, the following is a brief listing of the requirements for, and key elements of, the proposed capital investment review process:

- The review process is applicable to - and practiced collaboratively by - all FCRPS entities.
- The proposed process applies to any activity that relies on:
 - capital funding (U.S. Treasury, appropriations, third party)
 - represents a long-term commitment of funds - asset with an effective life of more than two years.
- All investments will be reviewed under a common set of standards and assumptions. Even "mandatory" investments should undergo financial and non-financial analysis.
- At the start of the process, the Managing Committee under the leadership of the COO provides guidance to business lines by:
 - aligning investment priorities with strategic direction
 - establishing performance targets for business line asset portfolios
 - providing key financial assumptions/inputs, including discount rates and multi-year capital spending ranges
- Corporate provides general economic assumptions for use in investment analysis, including inflation rates, evaluation methodologies, market prices, etc. Business lines provide BL-specific assumptions such as load growth, item-specific cost escalation, etc.
- Agency strategic direction and performance targets are a direct outgrowth of business line strategic plans. The Front Office is responsible for reviewing and approving business line strategic plans, bearing in mind the capital requirements inherent in those strategic

plans. As such, the front office sets BPA's direction, weighing together financial, non-financial, and public benefit goals and objectives.

- Business Line Management Committees establish Capital Investment Review Panels empowered to evaluate, approve and conduct ongoing review of capital investments
 - Panel composition and charter determined by BL Management Committees. We recommend that the Power Business Line consider including members of the other FCRPS agencies on the PBL Capital Investment Review Panel.
 - Panel members charged with representing FCRPS and/or business line as a whole, not advocating for respective organizations
 - Business line financial and project staff prepare capital investment business cases for the investment review panels.
 - Corporate financial staff serve as consultants to the business lines, as well as staff to COO and Corporate. Corporate staff also responsible for developing and refining overall capital investment review process.
- BL Capital Investment Review Panels determine ranking criteria for financial and non-financial factors and approve investments or classes of investments using that criteria. Criteria that may be used include:
 - Net present value, using market discount rates
 - ⇒ Discount rate based on market assessment of other firms with comparable risk profiles
 - Compliance with regulatory requirements
 - Reliability
 - Safety
 - Environment
 - Provision of public benefits
- BL Capital Investment Review Panels evaluate investments as a portfolio to assure business line-specific performance targets are relevant and achievable
- Under the direction of the COO and CFO, corporate staff will develop estimates of capital availability. The COO will issue preliminary allocations to the business lines. Final capital limits and allocations will be set by the Front Office, based on:
 - strategic direction and long-term availability of affordable capital
 - BPA and business line risk preference
 - available investments
 - regulatory/public benefit investment requirements (including fish under MOA or successor)
- Annual business line capital investment caps represent upper limits on total annual investments, including those funded by third parties. BLs must accommodate unforeseen investment needs under constraints of caps.
- Costs and revenues are collected and reported in a manner that enables performance accountability
- Capital investment needs and opportunities that arise outside this schedule year will be reviewed in much the same way as those included in the annual investment review process; i.e. evaluated and approved by the business line capital investment review panels

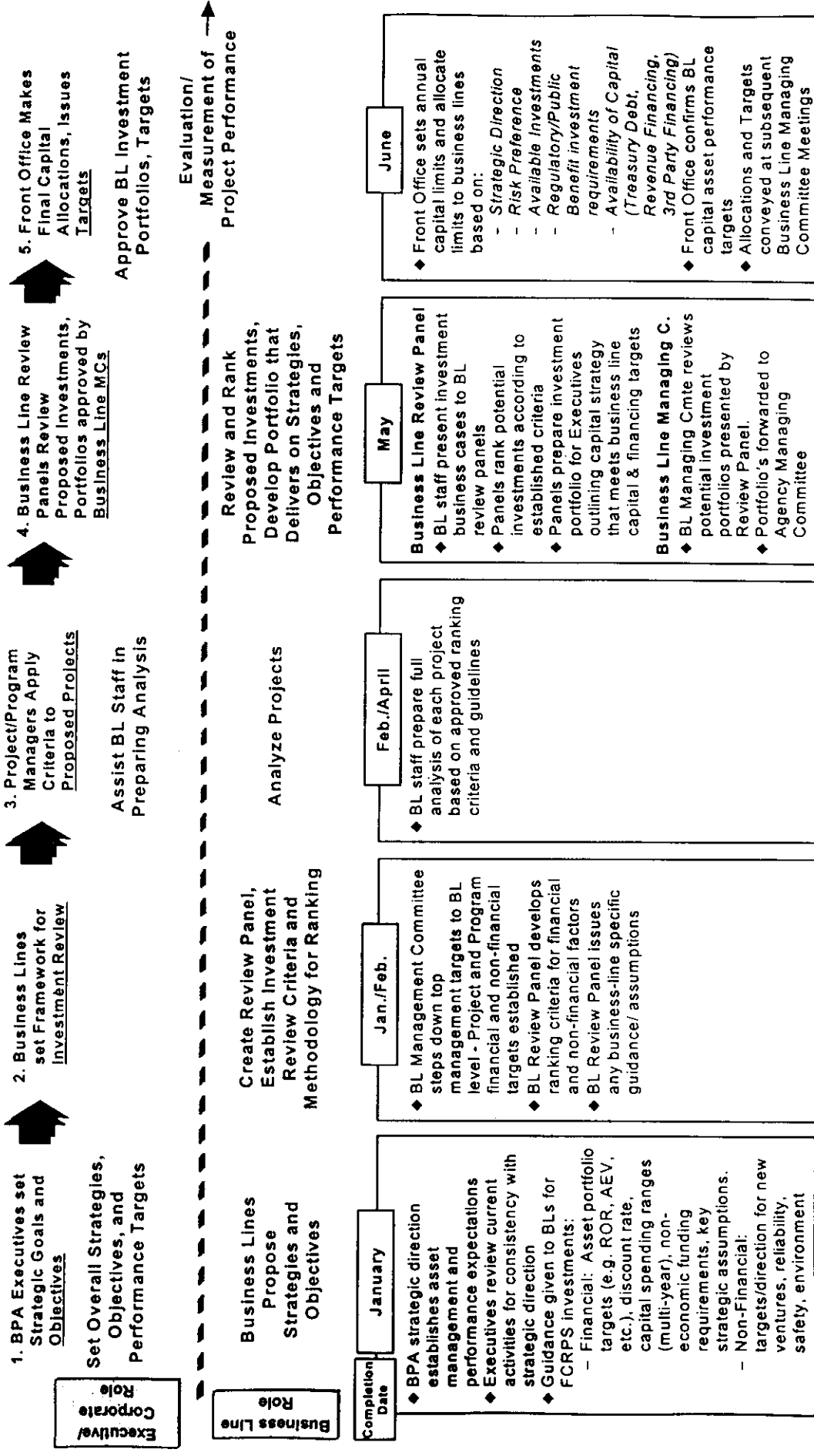
and then forwarded to the business line management committees for review to assure conformity with the strategic business direction and to assure available funding.

Timeline for Proposed Process:

As shown in the attached chart, the proposed process envisions the following basic timeline of events:

Nov.-Dec.	Under the direction of the COO, strategic guidance needed for capital investment planning is developed and issued to business lines. Business lines use guidance to establish investment review criteria, investment performance expectations, and BL-specific assumptions/guidance. BLs issue call for capital investment business cases to BL staff. BL Managing Committee's establish and empower BL Capital Investment Review Panel.
January-April	BL staff develop business cases for all proposed capital investments. These cases are submitted as a group to the BL Capital Investment Review Panel.
First 2 weeks of May	The BL Capital Investment Review Panels meets to review the proposed investment business cases. Using financial and non-financial criteria developed in January, they rank potential investments, creating a portfolio of projects/programs for submittal to the Business Line Managing Committee.
Last 2 weeks of May	The Front Office reviews capital investment portfolios, determines final capital allocations and reaffirm capital asset performance targets.

Proposed Capital Investment Review Process



Section 4: Top Management Guidance for the Capital Investment Review Process

Our benchmarking has reaffirmed that one of the most important factors in a successful capital investment strategy is clear top management guidance and direction throughout the investment development process. *The Vice Presidents we talked to at Weyerhaeuser made the particular point that without a clear vision of where the entity wants to go, with guidance and direction to business units that implement that vision, the process of choosing the best capital investments will be ineffective.* To emphasize the importance of strategic guidance, in their recent redesign Weyerhaeuser divided their investment strategy into two pieces. The first establishes the entity's vision and answers the question of what type and magnitude of investments the entity should pursue, or the "what" of capital investments. The second part is what is more traditionally thought of as capital budgeting; the "how" to make the right investments in the most efficient and effective manner.

While this overall capital investment review strategy focuses primarily on the second aspect of capital budgeting, this section outlines the elements of strategic guidance the capital budgeting team feels are essential to an efficient and effective investment review process.

As stated previously, a primary goal of BPA's capital budget process is to maximize the value of the FCRPS through strategic management of FCRPS assets. The purpose of strategic asset management is to create and deliver value by managing assets toward a common destination. Broadly speaking, this requires:

1. Developing a Vision: A vision is a destination; an accurate description of where each of the business lines in the FCRPS wants to be; where stakeholders receive the value the FCRPS is in business to deliver. It helps to clarify how each business line positions itself within the industry and how we define and deliver the benefits we produce. It should accurately describe:
 - Where do we want to be in XX years?
 - How will we know when we're there?
 - What will success look like?

The overall FCRPS and business line visions must be clear enough to provide practical guidance to decision-makers. Our managers need a clear understanding of the role each business line is to play in the region and how that impacts the investments to be made. This vision provides the basis upon which FCRPS executives manage the trade-offs among competing interests.

The greatest clarity of vision would associate quantitative measures with the value delivered to all stakeholders in the region.

2. Developing Strategy: Strategy is the course of action that enables each business line and its FCRPS partners to achieve the vision. Developing a robust strategy means evaluating strategic alternatives and choosing the alternative that best achieves the vision.

3. **Deploying Assets:** Asset deployment involves establishing which assets – which functions, activities, or businesses – are required to fulfill the vision, and aligning them in accordance with the strategy.
4. **Allocating Resources:** It is critical to decide how much and what kinds of resources are needed to carry out the strategy. Each business line in the FCRPS must have the appropriate assets and resources to reach the destination described in the vision.

The overall strategy for the FCRPS is developed through regional forums such as the Comprehensive Review. This regional strategy is translated into business line specific strategies through BPA's Strategic Planning Process. For the capital budget process to be successful, it requires that the vision and strategies be as specific and measurable as possible. It then becomes possible to develop criteria that measure how well our capital investments contribute to: a) meeting the business line and FCRPS' strategic goals and objectives; and b) reaching the destination(s) described by the business line and FCRPS visions. An effective capital budget process that employs these criteria will improve the quality of BPA's strategic and operating decisions. Strategic decision quality ensures that the capital resources under BPA's control are invested in projects that maximize the chances of achieving the business line's visions. Operational quality ensures that these investments are accomplished in the most efficient manner.

The process for developing top management guidance described here is based loosely on the process used by Weyerhaeuser. The process outlines the key parameters and assumptions we feel the business lines need to effectively develop and propose capital investments. It is divided into two phases in order to create the opportunity for feedback between initial top management guidance and final capital decision such as capital allocations between business lines, approval of specific major investments, and the establishment of key capital investment financial and non-financial performance measures. The decision on how to allocate scarce capital among the Bonneville's various activities is of critical interest to the business lines. The proposed process allows the portfolios of available capital investments, and their resulting financial and non-financial returns, to influence the final allocation of capital.

In order to develop the capital evaluation criteria that will be used to select projects, the Strategic Planning Process needs to provide the elements outlined in the following tables. After the tables for each phase of top management guidance, we have included a few additional insights into the commitments that we feel are important to make this aspect of capital investment strategy and review successful.

First Phase –

Timing: Prior to BL calls for capital project development. November - December

Substance/Purpose	Decision Needed	Policy implications	Inputs to Decision
1. Adoption/Approval of Business Line Strategic Plans: Approval includes understanding an acceptance of underlying capital investment needs. Directs BLs as to type of investments to analyze and propose. Also addresses the issues of BPA's public responsibilities/benefits.	Approval of business line strategic plans. Answers questions such as: <ul style="list-style-type: none">• Separation?• Position within the industry?• What products, services, public benefits, and to whom?• In which markets will they operate?• Public responsibilities/benefits, such as reliability, economic development, etc.	Ties directly to BPA mission statement and agency strategic goals and objectives.	<ul style="list-style-type: none">- TBL Strategic Business Plan- PBL Strategic Business Plan- ReCon Strategy- Capital Asset Management Strategic Plan- Customer/Constituent input
2. Capital Availability: Determines level of available capital for potential investments. This will help BL's understand the level of potential funding	Multi-year targets for total capital availability, including both BPA and non-BPA sources (appropriations)	How BPA will manage remaining borrowing authority (perpetually sustaining or run out by ?) What additional sources of capital should be pursued? When, how and for what would BPA use third-party financing? Revenue financing? New BA from Congress?	<ul style="list-style-type: none">- Financial Strategy- Analysis by CFO staff- Strategic Planning: potential for separation, increases to BA cap, etc.- Customer input through rate case proceedings (revenue financing)

Substance/Purpose	Decision Needed	Policy implications	Inputs to Decision
3. Capital Allocation: Preliminary allocation of capital availability to business lines	Multi-year targets (point estimate averages) for capital funding by business lines (including shared services and corporate)	FCPRS vision for each business line. Estimated returns of each business line.	<ul style="list-style-type: none"> - TBL Strategic Business Plan - PBL Strategic Business Plan - ReCon Strategy - Capital Asset Management Strategic Plan - Customer/ Constituent input
4. What financial returns will be required from: a) the Business Lines as a whole, and b) new capital investments?	Business line and/or capital asset portfolio targets (Net Revenue, AEV, ROR etc.)	Sustainable level of public benefit non-financial investments. Implications for performance measurement/rewards	<ul style="list-style-type: none"> - Returns of existing assets - Market-based discount rates
5. Discount Rate for Capital Investment Analysis: a) sets standard for selection of new investments, and b) helps assure risks are adequately accounted for.	Approval of the discount rate methodology and FY 2001 discount rates to be used for analysis Note: Rates will be recalculated annually or to meet sudden market changes	Potential of revenue producing assets to fund non-revenue producing investments and activities	<ul style="list-style-type: none"> - Financial Strategy - Methodology and resulting discount rates prepared for Executive approval by CFO staff
6. Guidance/limits on non-economic investments – how much capital needs to be set aside for these, and therefore, how much is available for economic investments?	Annual capital funding amounts set aside for known non-economic investments. Direction on planning for unknown investments.	Fish & Wildlife mitigation policy. Environmental compliance policy. Other Public Benefits (Support for conservation/ renewables, economic development, etc.).	<ul style="list-style-type: none"> - Integrated Fish Funding Plan - Environmental abatement and cleanup aspects of ReCon strategy - BL staff analysis

Second Phase –

Timing: After business lines and shared services have developed proposed capital investment portfolios, prior to inclusion in operating year or Congressional budgets. Last two weeks of May

<u>Substance/Purpose</u>	<u>Decision Needed</u>	<u>Policy implications</u>	<u>Inputs to Decision</u>
1. Capital Allocations by Business lines, Shared Services, and Corporate	Final allocation of capital for upcoming operating year budgets. Planning capital amounts by major category within business lines for Congressional budget. Planning allocation of capital by business lines for Congressional Budget Year +4	Display of remaining borrowing authority in Congressional budget. Discussion of third party financing plans in Congressional Budget. Potential request for additional borrowing authority.	<ul style="list-style-type: none">- Capital portfolios proposed by BLs- Regulatory/Public benefit investment requirements- Risk Preference- Availability of funds under current or proposed rates- Analysis by CFO staff- Customer/ Constituent input
2. Approval of Major Capital Investments	Business Line Managing Committees individually review and approve major capital investments	Consistency with BPA vision and Strategic goals/objectives	<ul style="list-style-type: none">- Business Line Staff who prepared business case
3. Capital Investment Performance Targets: Front Office reviews and approves asset portfolio performance measures	Capital investment performance targets set	Connection to Business line financial and non-financial targets	<ul style="list-style-type: none">- Performance measures proposed in business cases- Review of past performance measures: performance results and the effectiveness of the measures.

Essential Top Management Commitments

- Clear documentation of all key objectives and targets. Strategic direction needs to be clear and unambiguous. We need to extend to this strategic direction the same level of clarity being developed for manager's contracts. (I.e. Weyerhaeuser's two way contract for investment performance).

- Require that all investments undergo review, including investments for other than economic returns
- Understanding and commitment of staff time and effort needed to complete analysis.
- Commitment to performance measurement – dedicating staff time and effort to setting performance targets, developing the methodology to measure targets, and then following through with the measurement and accountabilities.

Section 5: Capital Availability and Allocations to Business Line

As with all firms, the level of FCRPS capital investments will depend upon the ability to sustain current and future access to capital. This is particularly true for investments BPA funds directly. Virtually all FCRPS transmission investments are funded either directly or indirectly by Bonneville, and with the direct funding agreements now in place with the Corps of Engineers and the Bureau of Reclamation, the vast majority of power investments are also funded by BPA borrowing or third party debt.

In setting annual capital limits, how we define capital availability is crucial. Some sources of capital are virtually assured, such as remaining Treasury borrowing authority. Other capital sources have a more tenuous assurance of availability. The annual capital investment cap approach outlined in this section is cautious, given the uncertainty of non-Treasury borrowing sources. In essence, when planning capital budget levels, we have to be assured that BPA can fund planned spending levels with sources of capital that are both reasonably available (assured) and cost-effective (low cost of capital).

As outlined in the previous section on top management guidance, once the BPA-level of sustainable capital availability is determined, it must be allocated to business lines. Allocation of that capital availability among business lines, including corporate, will depend upon a balancing of many factors, including FCRPS and BPA business line strategic direction, risk preferences, available investments, regulatory/public benefit investment requirements, and business line projected performance (the estimated rate of return on business line assets).

This recommended approach is a departure from past BPA subjective allocation decision-making. The recommended approach mirrors competitive business practices and is consistent with best practices in the utility industry and other industries. Since this approach will present a rather abrupt change we recommend a phased implementation over the next two budget processes. As such, we recommend that the FY2000 budget process to be a “transition” year, with full implementation set for FY 2001.

Lessons from Benchmarking

The recommended approach borrows heavily from ideas we have learned in our benchmarking. We found that all firms are fully cognizant of limitations to capital availability. Weyerhaeuser indicated that they have a portfolio of very promising capital projects that it will not be undertaken because of limited capital (due to the Asian economic downturn). That company has limited its capital budget to its available capital by focusing its planned investments on the company’s core business. BPA must do the same.

Annual “Affordable” Capital Budget Levels

At this time capital access is evaluated from an integrated agency perspective. Since BPA has a single fund, capital availability is developed at the agency level, not the business-line level. Further, BPA manages its remaining borrowing authority to sustain long-term capital availability to the agency as a whole. BPA’s principal supplier of capital, the U.S. Treasury, as well as other Federal agencies (OMB etc.) focus their

concern on the agency's (not business lines') ability to sustain annual repayment requirements to the U.S. Treasury.

Management of candidate capital sources, whether Treasury or other, are, and will remain, corporate-level financial concerns. Maintaining BPA's credit and credit ratings on third-party debt affects the financial and fiscal health of all of BPA. These concerns loom larger than business line concern over future funding sources for several reasons. Adding new, non-traditional funding sources generally affects an institution's fiscal health because of the additional fixed costs (incremental debt service) and associated diminished long-term fiscal flexibility. BPA cannot take on added financial risk without recognizing the cost of that incremental risk.

Implications for BPA's Current Budget Planning

There is a dependency between access and cost of sustainable assured capital funding and using that capital to improve the productivity and return on BPA's assets. Limiting capital spending to the level of assured and sustainable capital funding will likely have a jarring impact on BPA's current budget planning. As shown in the table below, there is a significant gap between BPA's "Congressional 2000 Budget" and a budget limited to sustainable levels of remaining Treasury borrowing authority.

	Planned Capital Spending (\$ Millions)					
	Fiscal Years					
	1999	2000	2001	2002	2003	2004
Congressional 2000 Budget	258	320	340	296	293	244
100% Reliance on Remaining B/A	<u>201</u>	<u>214</u>	<u>201</u>	<u>203</u>	<u>201</u>	<u>201</u>
Shortfall from 100% Assured Sources	-57	-106	-139	-93	-92	-43

As BPA can add other sources of funding that are reasonable assured, that gap can be diminished or even eliminated. Barring the additional, assured sources, the only alternative is to reduce overall capital spending levels. Addressing this gap and the means to close it will be part of the 1999 Financial Strategy, due for release in May.

Business Line Allocation Levels

The allocation to each business line depends upon the ability of each business line to use (invest) capital funds to generate a return on business line assets and on the level of required and desirable non-economic investments. BPA must balance the use of scarce capital between prospective investments that best improve the return on FCRPS assets and non-economic investments. A process that successfully accomplishes this balance will achieve the highest possible return on FCRPS assets that is consistent with BPA's mission and vision.

Each business line's portfolio of proposed capital investments will depend upon fiscal performance targets and BPA/business line objectives. As indicated in the previous section, fiscal performance targets need to be developed and available to each business line prior to capital budget planning. Business Lines can use the capital investment

review process proposed here to find the best mix of capital programs to meet the financial targets, as well as other business line objectives.

FY2000 - The Transition Year

At this writing, BPA is well into the FY 2000 budget planning process. However, the limitation of scarce capital availability remains. BPA cannot afford a capital budget in FY 2000, or any other year, that is incompatible with sustained access to capital funding. It would be unreasonable, however, to request business line budget planners to individually rank investments and identify this year the expected performance on each asset or investment program. FY 2000 will therefore need to be a transition year. A reasonable, second-best approach is to measure and direct capital funds to high-performing asset portfolios.

We recommend a "decremental budget planning" approach for the FY 2000 budget planning process. Decremental evaluations will be at the business line (or portfolio) level. Decremental planning will require that the business lines identify program funding and the expected returns on four levels of funding for their investment portfolio: 100, 85, 75, and 50 percent. Using this analysis, coupled with non-financial agency objectives, the Managing Committee can decide FY 2000 capital funding allocations.

FY 2001 – Full Implementation

By the FY 2001 planning process we should have the full multi-attribute decisionmaking process in place where individual investments are ranked using financial and non-financial criteria. Allocation of capital to business lines will then depend upon executive management's review of promised performance of each competing program. Program managers will be held accountable for promised performance.

Increasing the return on FCRPS assets is a paramount objective in program allocation. That being said, the overall BPA capital program has to have a balanced allocation to meet the complex objectives of the agency.

Section 6: Discount Rates – Use and Derivation

BPA will allocate (or invest) capital funds in a variety of capital programs based upon financial and non-financial criteria. As stewards of both revenue-producing assets and investable capital funds, our goal is to achieve the highest possible benefit from those assets and the return on those investments.

In addition to economic investments, there are numerous BPA programs that are not intended to be revenue-producers. These are mission-related projects, enabler (general service) projects, safety, regulatory-required, and others. It is important that these non-revenue-producing investments be evaluated along with revenue-producing investments so that the net cash consequences of each can be readily understood.

Cash Flow Analysis and Uncertainty

The foundation of the analytical standards proposed here is **investment-level** net annual cash flow estimation. The net annual cash flow estimates are the annual estimates of cash receipts less outlays that result from the program or project. Cash flow uncertainty should be evaluated at the project or program-level, whichever is relevant. The program-level cash flow should be evaluated for uncertainty in cash receipts (revenue) and cash outlays (expenses). The standards for this project specific uncertainty analysis are outlined in section 10 of this proposal.

Evaluating Risk

Uncertainty analysis reflects unknowns in cash flow estimation. It does not include market and other risk factors. Market risk is embodied in the discount rate and is specific to the level of risk in a particular industry. The regulated transmission business and the soon-to-be deregulated power businesses have different levels of risk. The fiberoptics business, as part of transmission, has a level of risk that differs from the core, mission-related transmission business.

There are two factors considered in setting discount rates: market factors and risk factors. The two factors are somewhat inter-related. The market factor reflects the price (or rates) constraints that a competitor in that industry faces. For example the market factor in BPA's regulated transmission business depends upon the regional industry's (actually, BPA's) competitive exposure to price competition. The rate that BPA charges is relatively inelastic (it can raise its transmission rates, without loss of customers) up to some level, at which a "build-around" or regulatory challenges become a threat. The rate inelasticity within bounds argues for a low discount rate. In contrast the deregulated power business line has much higher customer loss exposure to changes in rates.

The risk factors reflects the type of industry under evaluation. From an industry perspective, risk determines the rate of return that an investor would require for making the investment. Clearly, an investor would expect a higher rate of return when investing in an industry that does not have regulated prices or rates. Again, a deregulated power business should have a higher rate of return than the transmission business. The fiberoptics business, which is a portion of the larger, "telecommunications" business, should have an even-higher level of risk and reward because of the fast-paced changes and potential obsolescence inherent in that industry.

The discount rate is higher than BPA's cost of debt. The discount rate, as used in the net present value analysis, essentially normalizes potential BPA program investments for the risk that is generic to that particular industry. It puts all BPA investments on a level playing field. Looking at the discount rates from another perspective, the discount rate effectively acts as a "hurdle rate", above which a program is anticipated to add positive cash flow to BPA. BPA should aim to exceed the hurdle rates for its revenue-producing investment portfolio in order to increase the value of the FCRPS. If BPA revenue-producing programs fail to generate enough revenues, consistent with industry-standard hurdle-rate-implied performance, we receive an insufficient return on our assets. Eventually, we fail to compete.

Recommended Discount Rates for FY 2001

As described earlier, the discount rates represent the return that investors in a specific industry would demand to compensate them for putting their capital funds at risk. We based these discount rates on the best empirical data source available, found in the "Ibbotson Yearbook", a well-recognized and often-used source of market and industry information. Our recent benchmarking of best practices within the utility and other industries confirmed both that Ibbotson was a good source and that our estimated discount rates were consistent with other, "best-practices" companies.

Programs in the Power Business	13%
Programs in the Transmission Business	9%
Fiberoptics Program	19%
Blended (Corporate) Programs	11%

Programs in the Power Business – For PBL, the discount rate should be 13%. This is the Weighted Average Cost of Capital (WACC) for the Telephone Communications Industry, SIC 481. This SIC was chosen because the telephone industry has moved from regulated to deregulated, similar to what is now occurring in the Power industry.

Programs in the Transmission Business – For TBL, the discount rate is 9%. This is the WACC for the Electric Services Industry, SIC 491. This SIC includes generation, transmission, and distribution companies, much of which is still highly regulated. Because the Transmission Business will remain regulated, this still represents the best estimate of the return that investors would require on transmission investments.

Fiber Optics Program – For the Fiber Optics Program, the discount rate is 19%. This is the 10-year average return earned by shareholders in the Telecommunications Industry excluding Radiotelephone, SIC 4813. The 19% discount rate is used to evaluate fiber-optics investments that BPA undertakes with other telecommunications service providers or other government bodies, including our traditional utility customers. The 19% discount rate is consistent with the 5-year payback criterion that BPA has adopted for these investment as well.

Blended (Corporate) Programs - The blended program includes, for example, the Business Solutions Project. We assume that a corporate capital program diverts capital from, and precludes the opportunity to earn a return on, capital programs in the TBL and PBL business lines. For analytic purposes we further assumed that the portion of revenue-generating assets in the PBL were roughly the same as those in the TBL.

Therefore, the discount rate for Corporate investments is the average of the TBL and PBL discount rates, or 11%.

Risk-Free Investments - The discount rate for risk-free capital expenditures, such as the call premiums paid on Treasury bonds, are valued at BPA's weighted average cost of capital (currently, 6.8%).

Why Not Use BPA's Cost of Capital (Borrowing)?

BPA's cost of capital (the interest rate at which BPA borrows from the Treasury) does not include business risk. It only includes financial risk, specifically, the risk that U.S. Treasury faces, when government agencies issue agency bonds. As a business, BPA must evaluate its risk from a business perspective.

Section 7: Business Line Capital Investment Evaluation Methodology

Two of the key objectives/goals the capital budgeting team set for this revised capital investment review process were to clearly define roles, responsibilities and timelines and to clearly link performance measurement and accountability to the investment review process. Underlying these goals is the requirement that top management establish clear agency strategic direction and performance expectations, with accompanying performance measures and targets. The business lines are then empowered to make the operational and investment decisions needed to implement the agency strategy and achieve performance targets within generally accepted parameters.

The capital investment review process herein outlined seeks to establish agency-wide analytical standards with accompanying procedures and policies that will assure top management that capital investment analysis is being conducted in a professional and consistent manner across the agency. With this assurance, top management can focus their efforts on developing strategy, setting effective targets, and establishing a culture where performance measurement and rewards are effective means of furthering the agency's strategic direction.

An important aspect of empowering the business lines is the establishment of Business Line Capital Investment Review Panels that will oversee the process of capital investment business plan development within the business lines. Given the nature of their responsibility, we propose that these panels be composed of BPA VPs, or other staff with an equal level of decision making discretion and authority. The panel members would be charged with representing FCRPS as whole, not advocating for respective organizations. The review panels would be given the following tasks within the capital investment review process:

- Developing and implementing a multi-attribute decision-making process.
 - Translating strategic direction and performance targets into financial and non-financial criteria
 - Determining the weighting scheme or other methodology used to prioritize and rank individual projects
- Implementing the agency capital investment review process through developing business line specific guidance and issuing the annual call for capital budget development, including establishing necessary timelines and responsibilities.
- Translating agency and business line performance measures and targets to the project level, establishing performance measures and targets for each project.
- Reviewing proposed capital investments, and through application of the criteria and weightings established earlier, developing a capital portfolio for submittal to top management.
- Developing the proposed level of business line funds for either emerging projects or emergencies.
- Presenting the proposed capital portfolio to the business line managing committee. Resolving issues raised by management, and overseeing any revisions requested.
- Periodically reviewing progress on capital investments, including review of performance results. Approving, or forwarding to BL managing committees,

significant changes in timelines or project scopes during the year. Developing updated capital spending estimates for quarterly review and other business line or agency financial reporting requirements.

- Reviewing capital investment proposals that occur outside the annual process due to emerging opportunities or emergencies.
- Working actively with CFO financial staff to review and modify the agency capital budgeting process and guidelines to foster continual process improvement.

Further refining the composition, roles, and responsibilities of the business line capital investment review panels will be an important aspect of the second, implementation phase of this proposal.

Section 8: Multi-Attribute Decisionmaking – Weighing Evaluation Criteria

One of the greatest challenges in capital investment decision-making is balancing the financial aspects of an investment, such as net present value, with non-financial aspects such as safety, reliability, provision of public benefits, etc. To facilitate comparison of projects, this review seeks to impose certain financial criteria and analytical requirements upon all capital investments, regardless of their purpose. These financial criteria, such as use of market-based discount rates, sensitivity analysis, and calculation of net present value and internal rate of return will provide invaluable information for making capital investment decisions. Decisions, however, will not be based solely on these financial results. BPA, or any other company, must balance the financial desirability of investments with other decision factors that may be of equal or greater importance. This balancing of financial and non-financial criteria is at the heart of multi-attribute decisionmaking.

Under this proposal, developing and implementing a multi-attribute decisionmaking process will be one of the key responsibilities of the Business Line Capital Investment Review Panels. Following the provision of top management strategic guidance and objectives in November, the Business Line Review Panels have the responsibility of translating this guidance and objectives into financial and non-financial criteria. In many ways, the resulting criteria will be the most visible and concrete manifestation of what the strategic guidance and objectives mean to the business lines and how they will influence business line actions. In addition to developing the criteria, the panels will also be responsible for their use in ranking capital investment opportunities. The appropriate criteria and the accompanying weighting scheme are then given to those within the business who are responsible for developing capital investment proposals, effectively communicating to staff how agency and business line strategic guidance/objectives are to be implemented.

These criteria and their weighting can also be an important tool for verifying that top management and business line management are interpreting the strategic guidance/objectives in a consistent manner. In our benchmarking, we learned that one of the firms uses this approach by dedicating the first part of every capital budget review meeting between the CFO and program manager to a discussion of the criteria and weighting used to rank projects. We recommend a similar course of action. The business lines will include in the presentation of their recommended capital investment portfolio an outline of the criteria they developed and how they are used to determine which projects to include in the portfolio. These criteria should also be the basis for non-financial performance measures.

During the implementation phase of this proposed process, the capital budgeting team will work closely with the business line review teams to develop both appropriate non-financial and financial criteria, and the methodology used to apply the criteria in ranking capital investments.

Section 9: Capital Investment Performance Measurement

As stated in the objectives, one of the most important advances envisioned in this revised capital investment review process is improved performance measurement. Our benchmarking made it apparent that BPA is not alone in its difficulties with effective performance measurement. Every firm we talked to expressed dissatisfaction with their current attempts to measure the effectiveness of specific investments. The common impediments cited included the difficulty of tying incremental revenues to incremental investments and establishing accountability when managers responsible for projects have moved on before the project's long-term effectiveness is measured.

To enable better performance measurement, we are proposing that performance measurement become an integral part of the entire investment planning and implementation process. We propose that as investment business cases are developed, project sponsors be responsible for also developing both the performance measures they intend to use and the methodology needed to measure them. These measures should include both traditional cost control targets, revenue or other performance targets, and non-financial measures, as appropriate. These proposed measures should be actively discussed and confirmed by the Business Line Capital Investment Review Panels when investments are approved for inclusion into capital portfolios.

Whenever possible, output/results performance targets, such as revenues earned, power generated or transmitted, etc. should be drawn directly from the cashflow analysis. This will serve to both encourage accurate and reasonable cashflow forecasts and to create an audit process whereby forecasting techniques can be improved for subsequent investment analyses.

We recognize that establishing effective performance measures for the output or results poses a significant challenge for many FCRPS investments. Many investments are not discrete, with discrete revenue or cost savings streams. Rather they become integral parts of larger, existing assets, such that it is difficult to isolate the impact of the new investments on the performance of the larger existing assets. In such cases, it becomes even more important that performance measurement be addressed with the development of the business case, so that relevant and effective surrogate targets can be created. When more straightforward output/results targets are not possible, the business case should outline the surrogate target, and the means by which it will be calculated and measured.

During the implementation phase of this proposal, the capital budgeting team will work closely with business line and BSP staff to facilitate both the development of effective performance measures and the financial and other systems to gather the necessary revenue and cost data. One key aspect of this effort will be to establish a methodology to aggregate assets by economic unit, facilitating the connection between revenues and the assets that generate them.

Section 10: Guidance for Capital Investment Review Analytical Standards

Introduction and Objectives

The following represent guidelines for developing business cases for proposed capital investments. These guidelines represent the cross-agency standard for the review of all capital investments. Each business line may require additional information/analysis for their internal review. This additional analysis, if required, will be established, and transmitted to project developers, by the business lines.

The objectives of this common, agency-wide guidance are to:

1. Create a framework using multi-attribute decision making for approving long-term commitments of scarce capital resources (borrowing and future revenues)
2. Clearly define roles, responsibilities and timelines
3. Foster consistent and comparable reviews of alternative capital investments or long-term expense commitments, while retaining reasonable flexibility for the business lines; and
4. Clearly link performance measurement and monitoring – with an understanding of how actuals will be compared to forecasts.

Scope of Review

The proposed capital investment review process and this guidance apply to any activity that relies on either capital funding (U.S. Treasury, appropriations, third party) or that represents a long-term commitment of funds towards an asset with an effective life of more than two years. This process is applicable to, and should be practiced collaboratively by, all entities in the FCRPS. The level and complexity of analysis and review will vary by type, magnitude, and/or purpose of the investment. However, regardless of the size or the degree of control Bonneville has over an investment, each should be included in the proposed review process.

To facilitate development and review of capital investment opportunities, one of the business line's first responsibilities in implementing this proposed process will be to appropriately group investments into projects and programs. Clearly defined and understood projects and programs will greatly improve the efficiency and manageability of the capital investment review process. The division of investments into manageable units has long been a challenge for BPA and other utilities.

The benchmarking experience with one of the firms illustrates a case study of how to get past this difficulty of definition. They operate under performance-based rate-making and, like BPA, strives to allocate capital toward its most productive assets that improve shareholder value and produce dividends. Their board of directors and its executives set return on investment targets for each business line. Each senior VP is responsible for assuring that targets are met for his/her business line.

They have approximately 50 capital "programs", each with an assigned program manager. For them, a "program" is a "collection of related expenditures". A program typically includes several "capital projects". Some programs and projects are non-revenue producing, that is, revenues that cannot be measured in a direct way. Some are

general service or “enabler” programs or projects that can be measured by avoided cost. There are non-capital items included in many programs, such as preventative maintenance and just-in-time maintenance planning. The programs strive for the right balance between reactive and proactive. The program tries to capture internalized efficiencies and synergies among projects. Managers measure the prospective and actual program results on both standardized financial performance measures and performance measures recommended by the managers themselves. However, the senior VP has to meet the aforementioned financial targets, as well as maintain a balanced capital portfolio. The objective is to incentives program managers to design and make changes to programs to get the best overall results and to allow performance evaluation of those results.

During the implementation phase of this process, we will work closely with the business lines to define programs in such a way that they make sense. Like the benchmarked firm, BPA should define these programs in a way that is consistent with the ultimate objective of getting improved overall results.

Common Assumptions

To foster consistent and comparable analysis and review, certain common assumptions will be used by all capital investment business cases unless there is a compelling reason. These common assumptions will be developed by corporate in cooperation and consultation with the business lines and will be updated as needed. Whenever possible, these assumptions will mirror those used in rate cases, Federal budgets, flight plans, and other internal and external budget processes. Variance, when necessary, from these common assumptions should be fully documented in the business case.

1. *General Inflation:* All cost and revenue cashflows should be stated in nominal terms, since the discount rate will also be stated in nominal terms. Forecasts of general inflation/cost escalation will be provided by corporate and will tie to forecasts used in rate cases and/or Federal budgets.
2. *Specific Cost Escalation:* Specific cost escalation factors should be used if the costs for certain activities or portions of an investment are expected to change at a rate different than the general inflation rate. Use of specific escalation factors should be documented in the business case.
3. *Discount Rates:* In cooperation with the business lines, corporate will develop discount rates for use in calculating present value amounts for all capital investments. These rates will be updated as needed. See section 6 for more information on proposed discount rates for the upcoming budget process.
4. *Future Market Prices:* In order to facilitate comparison of projects within and between business lines, we recommend the development of a common forecast of future market prices based on fundamental economics. This forecast would be developed specifically for use in the capital investment review process.
5. *Treatment of Overheads:* One of the most important concepts in capital budget analysis is to focus only on incremental changes to costs or revenues that are a direct result of the investment. As such, overheads should be included in business

cases only to the extent that they are increased or decreased as a result of the investment.

Since it is not always easy to determine the impact of a proposed investment on the need for overhead services, we will use the following simplifying assumption. In developing business cases, project/program managers should include business line specific overheads in cashflows (often called indirects or internal overheads). These overheads should be included because they represent business-line specific activities that directly relate to the management and evaluation of capital projects and other business line activities. Corporate overheads, on the other hand, should not be included in investment cashflows unless the investment will require an increase, or will result in a decrease, in overheads from current estimates.

Business Line Specific Assumptions

Consistency and comparability are particularly important when multiple projects are presented for review and approval. Whenever possible and reasonable, business lines should strive to use common assumptions in each business case for key variables such as load growth, demand and load patterns, etc. These assumptions, and any sensitivities run on them, should be thoroughly documented in each investment's business case or in an appendix attached to multiple business cases.

Proposed Outline for Capital Investment Business Cases

As before stated, two of the primary objectives of this revised capital investment review process are to:

- a) create a framework using multi-attribute decision making for approving long-term commitments of scarce capital resources (borrowing and future revenues), and
- b) foster consistent and comparable reviews of alternative capital investments or long-term expense commitments, while retaining reasonable flexibility for the business lines

In order to foster consistent review, we are proposing the following outline for capital investment business cases. This outline represents the minimum level of analysis and documentation required for investment proposals. It is our intent that business lines retain the flexibility to develop systems and procedures that meet these requirements, as well as any additional analysis or documentation they may desire. The development of business line specific analytical processes is an important element of the subsequent implementation phase of this capital investment review proposal.

During the implementation phase of this proposal, the capital budgeting team will also be considering the use of a software tool to facilitate the collection, comparison and review of capital investments. We encountered centralized systems at both two of the benchmarked firm. Both firms have found the use of a common database for capital investment business cases to be invaluable in increasing the simplicity and comparability of investment proposals. The capital budgeting team has been in contact with BSP staff to investigate the possibility of such a system within the overall asset and project management systems being developed within the BSP. Results of these conversations so far have been very encouraging.

Whether BPA chooses to use a common database system, or not, we recommend a standard format of the presentation of business cases. A common format would help ensure that:

- a) critical information on each investment, such as net present value, IRR, cashflows, and non-financial criteria are located in the same place for each business case, allowing quick comparisons.
- b) all required information and analysis have been developed, using the format as a reminder of what is required.
- c) the level of analysis is correctly understood and all assumptions are clearly documented.

The following attachment outlines our recommended standard format for business cases, with a section by section description of the required analysis.

Title Block: In addition to the investment title, the title block provides space for an indication of whether the investment is a discrete project or a collection of individual projects approved as a program. Also provided are spaces to record investment approval. The list of approvals can be tailored to meet the needs of each specific investment, including a potential space for approval of plant accounting, if needed. (In order to deal with issues of investment classification, TVA requires that plant accounting staff review all capital investments to assure that they are properly categorized as capital. BPA may want to consider a similar requirement.)

- I. **General Information:** The project or program manager should be the individual who either prepared or coordinated preparation of the business case, and who will be responsible for the implementation and the results of the investment. During the review of proposed investments, the project/program manager is responsible for presenting the business case and answering any questions or requests for follow-up analysis. Once an investment is approved, the project or program manager will be the one responsible for meeting the performance targets agreed upon at the time of approval.

This section would also include a brief description of proposed capital investment with the need/driving factors behind investment. This description will serve as an executive summary of the business case.

II. Financial/Economic Analysis:

1. **Timeframe of Project:** This section outlines the major milestones for the investment, including dates in future when subsequent decisions need to be made for the investment. We will also request information on any future options that the project includes (the value of which will be included later under subsection 3). This information will help establish early in the evaluation the economic life of the project and the period of the financial evaluation.

Following the lead of a couple of the firms we benchmarked, the capital budgeting team proposes that a set financial evaluation period be established that factors in the increasing degree of uncertainty associated with revenues and costs in the far outyears. We would propose a maximum evaluation period of 20 years,

with shorter periods for investments that are particularly susceptible to obsolescence or for which far outyear costs and revenue estimates are particularly uncertain. We would also recommend sensitivity studies be run on projects where the NPV is sensitive to the length of the evaluation period.

2. **Financial Evaluation Results:** This section reports the results of key financial indicators. All capital investments will be evaluated for net present value or net present cost (if there are no revenues or explicit cost savings), using a market discount rate. The appropriate discount rate will be developed by corporate financial staff within the CFO's office and will be approved as part of top management guidance.

Business lines and project managers are encouraged to use other measures of prospective financial performance as well as NPV analysis. All of these measures use as a foundation the net annual cash flow. The most common measures, used in the utility and other industries, are:

Internal Rate of Return – The IRR is the discount rate that equates the present value of the project/program's expected cash inflows to the present value of the project/program's costs. It is the rate that forces the NPV to zero.

Discounted Payback Period – This is similar to the payback period except that the expected cash flows are discounted by the appropriate discount rate. The discounted payback period is the number of years required to recover the investment from discounted cash flows.

These financial measures should reference back to the detailed cashflow spreadsheet, which, in addition to the point estimate shown here, will also include a probability distribution of NPVs based on sensitivity analysis.

3. **Key Assumptions/Treatment of Uncertainty:** This section will document the key assumptions underlying the cost and revenue cashflow forecasts shown on the detailed spreadsheet. Common assumptions provided by corporate should be indicated, as well as any project/program specific assumptions. Business line specific assumptions that are common to several business cases may be included in an appendix and referenced here.

It is extremely important that all key assumptions that impact financial and non-financial indicators be carefully and clearly documented. Such documentation will allow reviewer to better understand key uncertainties and will simplify and clarify the discussion of how uncertainty has been addressed. Under treatment of uncertainty, briefly outline the method used in the spreadsheet to analyze and quantify cost and revenue uncertainty. Please include a brief explanation of why the methodology was chosen, with its relative strong and weak points. Where multiple business cases use a common methodology, the methodology can be documented in an appendix.

4. **Impact of Key Sensitivities:** The results of the uncertainty analysis are reported here. When relevant, results should be broken into the listed categories. For each category, the business case should list the assumption or aspect of the cashflow analysis being varied, with the resulting impacts on key financial indicators. The

text in this section can refer to graphics or other results reported on the spreadsheets. Significant correlations between variables should also be highlighted.

When applicable, this section should also address any unique implications from the source of financing, i.e. projects where tax-free financing is available, resulting in lower interest costs than in similar taxable financed alternatives. This section also provides an opportunity to outline any future option values a project may have, to indicate any linkages to other projects and to report on the past performance of similar investments.

- III. Non-Financial Criteria:** The essence of multi-attribute decision making is incorporating financial and non-financial criteria into the analysis of investment options. This section of the format documents the non-financial aspects of an investment. Whenever possible, these criteria should tie directly to agency and business line strategy, as captured in Strategic Business Objectives (SBOs) and Critical Success Indicators (CSIs).

In the attached outline, we have indicated four potential types of non-financial criteria. The non-financial criteria are up to the discretion of the business line review boards, and therefore may be more or less than those listed here.

- IV. Alternatives Considered:** One of the most impressive elements of Weyerhaeuser's process for developing and reviewing specific investment opportunities is a clear emphasis on exploring and evaluating alternative paths to achieving the required outcome. Weyerhaeuser's process includes a distinctive step requiring brainstorming of alternatives that, coupled with their instruction to hold-off on detailed cost and revenue estimates, fosters a culture where creativity and innovation are encouraged.

As part of the implementation phase of this proposed process, the capital budgeting team would like to explore how BPA can develop the same culture. This section of the business plan format would report of the results of this review of alternative means of accomplishing the required outcome, with a basic justification for the investment chosen.

V. Recommended Performance Measures

- 1. Financial/Performance Measures:** As before stated, performance measurement should be an integral part of the capital allocation and budgeting process. To enable more effective measurement, each business case must include proposed performance measures, together with the methodology for calculating them. Where possible, financial/performance measures, which could include measures of revenue generation, capacity addition, cost reduction, or cost control, etc. should be drawn directly from the cashflow analysis. When it proves difficult to target and measure typical financial results such as revenue generation, the business case should recommend surrogate measures, such as use of pro forma financial statements to measure before and after financial results.

2. **Non-Financial Measures:** In addition to financial/performance measures, each business case should include relevant non-financial measures. These will be especially important for non-revenue producing investments for which financial measures are difficult to develop. Non-financial measures should tie to the non-financial criteria outlined in section three above.
3. **Connection to Agency and/or Business Line Targets:** In this section, project sponsors should outline how the proposed investment enables the business line to meet agency and business line financial and non-financial targets.

Proposed Outline for a Capital Investment Business Case

Investment Name: _____

Project _____ Program _____

Approvals:

BL Capital Review Board (or BL VP) _____

BL Managing Committee (or Managing Committee) _____

I. General Information

Project/Program Manager: _____

Project Technical Lead: _____

Business Line: _____

Project/Program Description: _____

Brief Description of Need/Driving Factors Behind Investment: _____

II. Financial/Economic Analysis

See attached spreadsheet with detailed cash flow analysis

1. Timeframe of project

Siting & Permitting: _____

Construction: _____

Major milestones/future decision points: _____

Plant-in-service date: _____

Estimated life of project: _____

Time period for evaluation: _____

2. Financial evaluation results

Discount Rate: _____

Net Present Value: _____

Internal Rate of Return: _____

Other Financial Indicators: _____

3. Key Assumptions/Treatment of Uncertainty

Revenue Assumptions – should include:

- Market scenarios (price estimates)
- Sales volume/load growth (estimates of units sold)
- Probabilistic weightings used to determine expected value

Cost Assumptions – should include:

- Investment cost
- Variable costs (incremental costs due to investment)
 - (a) Key cost estimation assumptions (e.g. inflation, real escalation, etc.)
 - i. Operations
 - ii. Maintenance
- Value of Unserved energy

Treatment of Uncertainty –

4. Impact of Key Sensitivities (list sensitivity, how varied, and impact on key financial indicators)

Timing – postponement before start, delays after start:

Revenue sensitivities – market prices, sales volume, obsolescence, unforeseen regulation, other:

Cost sensitivities – construction, operations, maintenance, inflation, other:

Past performance of similar investments:

Linkages to other projects – necessary project coordination

If applicable, unique implications from source of financing (taxable vs. tax-free):

Future option values of investment:

III. Non-Financial Criteria

Whenever possible, these criteria should tie directly to agency and business line SBO/CSIs

1. Reliability
2. Safety
3. Environment
4. Regulatory
5. Other

IV. Alternatives Considered

V. Recommended Performance Measures

1. Financial/Performance Measures
2. Non-Financial Measures
3. Connection to Agency and/or Business Line targets

Preliminary Screening Analysis

As part of the implementation phase of the capital investment review process, we will work with the business lines to investigate the potential use of an up-front screening analysis that would divide capital investments into categories, based on the level and rigor of analysis required. Such a division may be beneficial in helping business line staff prioritize workload and facilitate preparation of business cases. Such a screening analysis would occur prior to development of detailed cashflows and non-financial factors and would help determine the appropriate level of detail and precision required for the evaluation of each investment. One possible result of a preliminary analysis would be three levels of analytical rigor, as follows:

1. Full analysis – requiring development of full business case for each investment, with probabilistic analysis of cashflows, etc.
2. Partial analysis – Less extensive business case, relying on “rules-of-thumb” for uncertainty of cashflows
3. Check Off – requiring minimal analysis, with a check-off list based on replacement rules, policies, or broader program approval.

Attachment 2

	2002	2003				Total FY 2002-2006
	Accr/Obs	Accr/Obs	2004	2005	2006	
FY 2002 Congressional Budget						
Main Grid	78,427,922	104,867,074	27,208,530	42,405,934	34,604,769	287,514,229
Area and Customer Service	40,166,504	29,687,891	22,478,113	8,979,325	33,583,676	134,895,509
Upgrades/Additins, Total	32,075,124	31,368,537	35,226,261	37,637,690	32,868,598	169,176,210
Replacements	85,982,798	76,366,441	77,987,947	95,399,627	84,844,605	420,581,418
Subtotal (PBB Capital)	236,652,348	242,330,943	162,900,851	184,422,576	185,901,548	649,547,366
Projects Funded in Advance	25,000,500	25,000,000	25,000,000	25,000,000	25,000,000	125,000,500
Total PBB Capital	261,652,848	267,330,943	187,900,851	209,422,576	210,901,548	774,547,866
Associated Projects, Total	89,932,000	86,728,000	61,732,000	62,172,000	62,151,000	362,715,000
Fish and Wildlife	34,732,000	38,317,000	35,825,000	33,988,000	34,182,000	177,044,000
Conservation/Energy Services	0	0	0	0	0	0
Total PBB Capital	261,652,848	267,330,943	187,900,851	209,422,576	210,901,548	774,547,866
Total Congressional Budget	261,652,848	267,330,943	187,900,851	209,422,576	210,901,548	774,547,866

	2002	2003				Total FY 2002-2006	Total FY 2007-2011
	Accr/Obs	Accr/Obs	2004	2005	2006		
FY 2003 OMB Budget							
Main Grid	132,700,000	299,700,000	360,900,000	289,200,000	137,800,000	1,220,300,000	325,387,800
Area and Customer Service	33,700,000	6,700,000	7,100,000	25,700,000	58,700,000	131,900,000	91,291,300
Upgrades/Additions, Total	49,700,000	26,400,000	44,200,000	48,000,000	46,600,000	214,900,000	184,399,700
Replacements	82,900,000	72,700,000	85,200,000	78,900,000	81,200,000	400,900,000	463,502,000
Subtotal (PBB Capital)	299,000,000	405,500,000	497,400,000	442,800,000	324,300,000	1,958,500,000	1,064,580,800
Projects Funded in Advance	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000	125,000,000	125,000,000
Total (PBB Capital)	324,000,000	430,500,000	522,400,000	467,800,000	349,300,000	2,083,500,000	1,189,580,800
Associated Projects, Total	105,002,000	117,002,000	116,998,000	130,392,000	141,192,000	610,586,000	661,000,000
Fish and Wildlife	34,700,000	38,300,000	35,800,000	34,000,000	34,200,000	177,000,000	177,000,000
Conservation/Energy Services	26,000,000	42,200,000	60,000,000	75,800,000	96,000,000	300,000,000	200,000,000
Total (PBB Capital)	324,000,000	430,500,000	522,400,000	467,800,000	349,300,000	2,083,500,000	1,189,580,800
Total Congressional Budget	324,000,000	430,500,000	522,400,000	467,800,000	349,300,000	2,083,500,000	1,189,580,800

Budget Document: FY 2002 Congressional Budget

Master Table Line Description	Actuals 2000		2001	
	Accruals	Obs	Accruals	Obs
Main Grid	21,964,000	21,964,000	54,420,880	54,420,880
Area and Customer Service	4,624,000	4,624,000	25,216,182	25,216,182
Upgrades and Additions	36,968,600	36,968,600	22,955,744	22,955,744
Fiber Optics	1,179,400	1,179,400	23,993,177	23,993,177
Upgrades/Additins, Total	38,148,000	38,148,000	46,948,921	46,948,921
Replacements	50,864,000	50,864,000	66,419,695	66,419,695
Subtotal PBL Capital	115,600,000	115,600,000	193,005,678	193,005,678
Projects Funded in Advance	17,400,000	17,400,000	25,000,000	25,000,000
Total PBL Capital	133,000,000	133,000,000	218,005,678	218,005,678
Bureau of Reclamation	10,054,286	10,054,286	33,307,635	33,307,635
Corps of Engineers	23,271,589	23,271,589	42,844,365	42,844,365
Associated Projects, Total	33,325,875	33,325,875	76,152,000	76,152,000
Fish and Wildlife	13,897,476	13,897,476	27,000,000	27,000,000
Conservation/Energy Services	207,375	207,375	0	0
Total PBL Capital	45,480,726	45,480,726	106,152,000	106,152,000
Capital Equipment (IR)	4,670,000	4,670,000	5,500,000	5,500,000
PBL Information Resources	4,066,750	4,066,750	15,290,000	15,290,000
Business Solutions Project	17,530,000	17,530,000	7,500,000	7,500,000
Subtotal Corporate Capital	26,266,750	26,266,750	28,290,000	28,290,000
Capitalized Bond Premium	3,500,000	3,500,000	0	0
Total Corporate Capital	29,766,750	29,766,750	28,290,000	28,290,000
Total Capital (EXCLUDES PBLA)	162,797,456	162,797,456	324,447,678	324,295,678

Budget Document:

Master Table Line Description	2002		2003
	Accruals	Obs	Accr/Obs
Main Grid	78,427,922	78,427,922	104,867,074
Area and Customer Service	40,166,504	40,166,504	29,687,891
Upgrades and Additions	20,132,304	20,132,304	18,272,550
Fiber Optics	11,942,820	11,942,820	13,095,987
Upgrades/Additins, Total	32,075,124	32,075,124	31,368,537
Replacements	85,982,798	85,982,798	76,366,441
Subtotal PBL Capital	236,532,348	236,532,348	249,239,943
Projects Funded in Advance	25,000,500	25,000,500	25,000,000
Total PBL Capital	261,532,848	261,532,848	274,239,943
Bureau of Reclamation	41,227,626	41,227,626	37,427,170
Corps of Engineers	48,704,374	48,704,374	49,300,830
Associated Projects, Total	89,932,000	89,932,000	86,728,000
Fish and Wildlife	34,732,000	34,732,000	38,317,000
Conservation/Energy Services	0	0	0
Total PBL Capital	124,664,000	124,664,000	124,021,000
Capital Equipment (IR)	6,000,000	6,000,000	6,000,000
PBL Information Resources	2,000,000	2,000,000	2,000,000
Business Solutions Project	0	0	0
Subtotal Corporate Capital	8,000,000	8,000,000	8,000,000
Capitalized Bond Premium	5,200,000	5,200,000	3,000,000
Total Corporate Capital	13,200,000	13,200,000	11,000,000
Total Capital (EXCLUDES PBL)	374,516,348	374,516,348	378,334,923

Budget Document:

Master Table Line Description	2004	2005	2006
	Accr/Obs	Accr/Obs	Accr/Obs
Main Grid	27,208,530	42,405,934	34,604,769
Area and Customer Service	22,478,113	8,979,325	33,583,676
Upgrades and Additions	22,949,428	24,946,592	25,374,333
Fiber Optics	12,276,833	12,691,098	7,494,265
Upgrades/Additins, Total	35,226,261	37,637,690	32,868,598
Replacements	77,987,947	95,399,627	84,844,605
Subtotal PBL Capital	162,900,851	183,492,576	185,901,648
Projects Funded in Advance	25,000,000	25,000,000	25,000,000
Total PBL Capital	187,900,851	209,492,576	210,901,648
Bureau of Reclamation	30,023,006	34,955,978	34,770,521
Corps of Engineers	31,708,994	27,216,022	27,380,479
Associated Projects, Total	61,732,000	62,172,000	62,151,000
Fish and Wildlife	35,825,000	33,988,000	34,182,000
Conservation/Energy Services	0	0	0
Total PBL Capital	97,557,000	96,150,000	96,323,000
Capital Equipment (IR)	6,000,000	6,000,000	6,000,000
PBL Information Resources	2,000,000	2,000,000	2,000,000
Business Solutions Project	0	0	0
Subtotal Corporate Capital	8,000,000	8,000,000	8,000,000
Capitalized Bond Premium	3,000,000	3,000,000	3,000,000
Total Corporate Capital	11,000,000	11,000,000	11,000,000
Total Capital (EXCLUDES PBLA)	271,457,351	291,582,576	293,234,648

Budget Document: FY 2003 OMB Budget

Master Table Line Description	2001		2002	
	Accruals	Obs	Accruals	Obs
Main Grid	29,336,414	29,336,414	132,700,000	132,700,000
Area and Customer Service	27,422,860	27,422,860	33,700,000	33,700,000
Upgrades and Additions	16,830,736	16,830,736	26,300,000	26,300,000
Fiber Optics	41,970,137	41,970,137	23,400,000	23,400,000
Upgrades/Additions, Total	58,800,873	58,800,873	49,700,000	49,700,000
Replacements	72,239,853	72,239,853	82,900,000	82,900,000
Subtotal PBL Budget	131,040,726	131,040,726	132,600,000	132,600,000
Projects Funded in Advance	20,000,000	20,000,000	25,000,000	25,000,000
Subtotal PBL Budget	20,000,000	20,000,000	25,000,000	25,000,000
Bureau of Reclamation	33,900,000	33,900,000	57,709,099	57,709,099
Corps of Engineers	36,100,000	36,100,000	47,292,901	47,292,901
Associated Projects, Total	70,000,000	70,000,000	105,002,000	105,002,000
Fish and Wildlife	27,000,000	27,000,000	34,700,000	34,700,000
Conservation/Energy Services	0	0	26,000,000	26,000,000
Subtotal PBL Budget	27,000,000	27,000,000	60,700,000	60,700,000
Capital Equipment (IR)	9,700,000	9,700,000	4,600,000	4,600,000
PBL Information Resources	7,700,000	7,700,000	17,500,000	17,500,000
Business Solutions Project	4,600,000	4,600,000	4,200,000	4,200,000
Subtotal PBL Budget	22,000,000	22,000,000	26,300,000	26,300,000
Capitalized Bond Premium	0	0	2,200,000	2,200,000
Subtotal PBL Budget	0	0	2,200,000	2,200,000
Subtotal PBL Budget (Total)	178,040,726	178,040,726	226,200,000	226,200,000

Budget Document:

Master Table Line Description	2003		2004
	Accruals	Obs	Accr/Obs
Main Grid	299,700,000	299,700,000	360,900,000
Area and Customer Service	6,700,000	6,700,000	7,100,000
Upgrades and Additions	14,400,000	14,400,000	18,100,000
Fiber Optics	12,000,000	12,000,000	26,100,000
Upgrades/Additions, Total	26,400,000	26,400,000	44,200,000
Replacements	72,700,000	72,700,000	85,200,000
Subtotal PBL Projects	305,500,000	305,500,000	397,300,000
Projects Funded in Advance	25,000,000	25,000,000	25,000,000
Subtotal PBL Projects	305,500,000	305,500,000	397,300,000
Bureau of Reclamation	64,304,299	64,304,299	64,302,101
Corps of Engineers	52,697,701	52,697,701	52,695,899
Associated Projects, Total	117,002,000	117,002,000	116,998,000
Fish and Wildlife	38,300,000	38,300,000	35,800,000
Conservation/Energy Services	42,200,000	42,200,000	60,000,000
Subtotal PBL Projects	100,502,000	100,502,000	200,000,000
Capital Equipment (IR)	7,700,000	7,700,000	4,700,000
PBL Information Resources	14,100,000	14,100,000	18,250,000
Business Solutions Project	3,000,000	3,000,000	3,000,000
Subtotal PBL Projects	24,800,000	24,800,000	25,950,000
Capitalized Bond Premium	3,000,000	3,000,000	3,000,000
Subtotal PBL Projects	24,800,000	24,800,000	25,950,000
Subtotal PBL Projects	305,500,000	305,500,000	397,300,000

Budget Document:

Master Table Line Description	2005	2006	2007
	Accr/Obs	Accr/Obs	Accr/Obs
Main Grid	289,200,000	137,800,000	84,800,000
Area and Customer Service	25,700,000	58,700,000	41,200,000
Upgrades and Additions	20,200,000	21,800,000	22,400,000
Fiber Optics	27,800,000	24,800,000	10,400,000
Upgrades/Additions, Total	48,000,000	46,600,000	32,800,000
Replacements	78,900,000	81,200,000	99,300,000
Subtotal (PBL - Capital)	208,200,000	82,300,000	288,000,000
Projects Funded in Advance	25,000,000	25,000,000	25,000,000
Total (PBL - Capital)	233,200,000	107,300,000	313,000,000
Bureau of Reclamation	71,663,443	77,599,123	79,307,280
Corps of Engineers	58,728,557	63,592,877	64,992,720
Associated Projects, Total	130,392,000	141,192,000	144,300,000
Fish and Wildlife	34,000,000	34,200,000	34,700,000
Conservation/Energy Services	75,800,000	96,000,000	42,000,000
Total (PBL - Other)	200,192,000	271,392,000	221,000,000
Capital Equipment (IR)	5,500,000	5,800,000	6,000,000
PBL Information Resources	16,000,000	4,000,000	4,000,000
Business Solutions Project	3,000,000	3,000,000	3,000,000
Subtotal (Capital - Other)	24,500,000	12,800,000	13,000,000
Capitalized Bond Premium	3,000,000	3,000,000	3,000,000
Total (Capital - Other)	27,500,000	15,800,000	16,000,000
Total (PBL - All Categories)	260,700,000	123,100,000	329,000,000

Attachment 3

G-PROJECT		PRIORITY	POTENTIAL COST SHARE	Budgeted FY 2005	FY 2006	FY 2007
MAIN GRID						
WO	Project Name					
0001108	E. Seattle Reinf (K-EL)	G-1	High		5,000,000	5,000,000
0001109	N. Seattle Transf Reinf (SK)	G-1	High		10,000,000	10,000,000
	Schultz-Blackrock 500 kV line	G-2	High		2,000,000	2,000,000
	McNary-John Day 500 kV line	G-3	High		2,000,000	2,000,000
	Low Mon-Starbucks 500 kV	G-4	High		10,000,000	10,000,000
	McNary-Wallula 500 kV	G-5	High		10,000,000	10,000,000
0001110	Schultz 500 KV series caps	G-6	High		3,000,000	3,000,000
	Echo Lake-Monroe 500 kV	G-8	High		2,000,000	2,000,000
	Coulee-Bell 500 kV (WOH Ph 1)	G-9	High		10,000,000	10,000,000
	Olympia-White River & Coulee-Olympia		Med		2,000,000	2,000,000
	Line Relocations on Tribal Lands		Med		5,000,000	5,000,000
	Columbia Falls-Kerr Reconnector				2,000,000	2,000,000
	Seattle Area 500/230 kV Bank	G-11	Med		10,000,000	10,000,000
0001116	Pearl 500/230 KV bank	G-10	High		10,000,000	10,000,000
	Chemawa 230/115 kV Bank		Med			
	Santiam-Bethel Tap 230 Line #2		Med		3,000,000	3,000,000
0001111	Olympia 230/115KV Bank #3		Low	Yes		
	Olympia-Shelton 500KV	G-12	Med			
	Fairmount Shunt Cap				10,000,000	10,000,000
	Shelton-Fairmount 230KV line		Low			
0001122	Hanford-Ost. tap to Big Eddy	G-14	High	New		
0001120	N. Cross Cascades SC 500 KV		High/Med	sngl ckt line		
	Ponderosa 500/230 KV bk #2		Med	Yes		
	North Noxon Reinforcement (WOH Ph1)	G-20				
	L Goose-Starbucks 500 kV (WOH Ph2)	G-17	3		2,000,000	2,000,000
	Paul-Troutdale 500 kV	G-13			5,000,000	5,000,000
	Big -Eddy-Ostrander 500KV		High/Med			
0001130	McNary-Brownlee 230 kV (PNW-ID)	G-19	3		1,000,000	1,000,000
	Hatwai-Lolo 230 kV (PNW-ID)	G-18	3		5,000,000	5,000,000
	McNary-Tap on Ashe-Marion 500 kV	G-16			5,000,000	5,000,000
	Other Associated gen Integration				5,000,000	5,000,000
0001131	NERC Criteria Compliance		High/Med		5,000,000	5,000,000
0001135	Fire Suppression				5,000,000	5,000,000
0001137	System Reactive Facilities		High	Yes	2,000,000	2,000,000
0001138	Various Additions		High/Med		10,000,000	10,000,000
0001032	Total Main Grid				200,000,000	200,000,000

G-PROJECT		PRIORITY	POTENTIAL COST SHARE	2019-2020 \$1,200k	2020-2021 \$1,200k	2021-2022 \$1,200k
AREA & CUSTOMER SERVICE						
WO	Project Name					
0001149	Albany-Eugene Rebuild		Low		1,176.0	
0001144	Kitsap Penin Reinf		Low	Yes	1,705.0	
0001147	San Juan Cable Replcmt 69kV		Med	Yes	5,385.0	
0001158	Salem-Grand Rd Recond		Low	Yes	1,350.0	
0001153	Franklin Area Reinf. (recond)		High		2,000.0	1,750.0
0001154	Tanner		High		1,300.0	
	Red Mountain 115 kV Sub		High		1,000.0	620.0
	Walla Walla 115/69 Bank Repl		Med		1,000.0	1,220.0
	SW Ore Coast (Bandon-Rogue)		Med			
0001161	Goshen-Drummond Upgrade&Tx		Med		2,000.0	2,100.0
0001150	Trentwood 230/115kv bk/line		Low	Yes		
	Fairview SVC					
	Vintage Valley				500.0	1,000.0
	Port Angeles SVC					
	Santiam-Chemawa 230 Line#2					
	Harney system 138 kV upgrade		Low			
	Driscoll/Clatsop 230/115KV Tx		Med			
0001163	Longview 230/115-kV Bank #2		Low			
	Redmond 230/115KV Bank #2		Low			
	Palisades-Snake River 115 line		Low	Yes		
	Palisades-Goshen 161KV line/TX		Med			100.0
	East Omak 230/115KV Bank		Low			
	Libby-Bonniers Ferry 115 Recond					
	Libby - Troy Line Purchase		Med		220.0	
0001157	N. Idaho Reinforcement (Lib-Bonniers)	G-15				
	Midway-Grandview Recond					
	Substation X (U.S. Navy)			100.0	200.0	
0001168	Customer Service Items		High/Med	1,000.0	1,000.0	1,000.0
0001034	Total Area & Customer Srvc			10,275.0	20,075.0	10,000.0
UPGRADES & ADDITIONS						
WO	Project Name					
0001246	System Controls		High/Med		1,100.0	1,100.0
	Transmission System Development				1,100.0	1,100.0
	Flathead Valley Reinf (RAS)		High/Med		1,100.0	1,100.0
0001249	Fiber Optics (Incls Terminations)		Med/Low		21,700.0	11,000.0
0001250	Misc Line & Sub Additions		High/Med	Poss. Reduct.	1,000.0	1,000.0
0001038	Total Upgrades & Additions				24,900.0	25,300.0

		G-PROJECT	PRIORITY	POTENTIAL COST SHARE	FY 2005 FY 2005	Q1E06 FY 2006	Q1E06 FY 2006
SYSTEM REPLACEMENTS							
WO	Project Name						
0001170	Nonelectric Plant Replcmts		High/Med		1,000.0	1,000.0	1,000.0
0001171	Transmission Line Replcmts						
0001173	Substation Replcmts						
0001174	System Protection Replcmts						
0001175	Pwr Sys Cntrl Replcmts						
	Total M3C, M4C, M5C, M6C	G-7	High/Med		50,500.0	49,500.0	49,500.0
	Cellio upgrades				500.0	500.0	500.0
0001176	Tools and Equipment		High/Med		1,000.0	1,000.0	1,000.0
0001170	Emergency Funds		High		10,000.0	10,000.0	10,000.0
0001036	Total System Replacements				191,700.0	189,732.5	189,732.5
ENVIRONMENT							
WO	Project Name						
	PP&A--Fire Prot/Sec Contain		High				
0001621	PP&A--PCB Capacitor Replac		Low				
0001622	PP&A--Restoration						
	Total VR2C, VR4C, VR7C				1,000.0	1,000.0	1,000.0
	Cap ADP Equip--Environment		Low		700.0	700.0	700.0
0001041	Total Environment (PP&A)				9,075.0	9,045.0	9,045.0
ALL OTHER DIRECT CAPITAL							
WO	Project Name						
0001258	Capital ADP Equipment		High		700.0	700.0	700.0
	Completion of Prior Yr Items				100.0	100.0	100.0
0001254	Cap-to-Exp Adjustments				(2,000.0)	(2,000.0)	(2,000.0)
	<i>Undistributed Funding (Reduction)</i>						
	Total All Other Capital				(1,200.0)	(1,200.0)	(1,200.0)
SUB TOTAL TBL CAPITAL (DIRECT)					189,700.0	189,537.5	189,537.5
INDIRECTS							
0001190	TSD Program Indirect				1,000.0	1,000.0	1,000.0
	TSD MS&A				1,000.0	1,000.0	1,000.0
0001624	Support Services Cap Distribution				1,000.0	1,000.0	1,000.0
	Total TBL Indirects				3,000.0	3,000.0	3,000.0
AFUDC							
0001049	AFUDC				1,000.0	1,000.0	1,000.0
	Total AFUDC				1,000.0	1,000.0	1,000.0
CORPORATE OVERHEAD 1/							
0001185	Corporate Distributions				1,000.0	1,000.0	1,000.0
0001186	Corporate Shared Services				1,000.0	1,000.0	1,000.0
0001188	Corporate Legal Support				1,000.0	1,000.0	1,000.0
	Total Corporate Overhead				3,000.0	3,000.0	3,000.0
SUB TOTAL TBL CAPITAL (INDIRECT)					4,000.0	4,000.0	4,000.0
TOTAL TBL CAPITAL					193,700.0	193,537.5	193,537.5

		01/01/01 - 12/31/2001	01/01/02 - 12/31/2002	01/01/03 - 12/31/2003	01/01/04 - 12/31/2004	01/01/05 - 12/31/2005	01/01/06 - 12/31/2006
MAIN GRID							
WO	Project Name						
0001108	E. Seattle Reinf (K-EL)						
0001109	N. Seattle Transf Reinf (SK)						
	Schultz-Blackrock 500 kV line	10,000,000					
	McNary-John Day 500 kV line	10,000,000					
	Low Mon-Starbucks 500 kV	1,000,000					
	McNary-Wallula 500 kV	10,000,000					
0001110	Schultz 500 KV series caps						
	Echo Lake-Monroe 500 kV	10,000,000	10,000,000				
	Coulee-Bell 500 kV (WOH Ph 1)	10,000,000					
	Olympia-White River & Coulee-Olympia						
	Line Relocations on Tribal Lands	10,000,000	10,000,000	10,000,000			
	Columbia Falls-Kerr Reconnector						
	Seattle Area 500/230 kV Bank	10,000,000					
0001116	Pearl 500/230 KV bank						
	Chemawa 230/115 kV Bank			10,000,000	10,000,000		
	Santiam-Bethel Tap 230 Line #2						
0001111	Olympia 230/115KV Bank #3				10,000,000	10,000,000	
	Olympia-Shelton 500KV	10,000,000	10,000,000	10,000,000			
	Fairmount Shunt Cap						
	Shelton-Fairmount 230KV line						10,000,000
0001122	Hanford-Ost. tap to Big Eddy	10,000,000	10,000,000	10,000,000			
0001120	N. Cross Cascades SC 500 KV		10,000,000	10,000,000	10,000,000	10,000,000	
	Ponderosa 500/230 KV bk #2				10,000,000	10,000,000	
	North Noxon Reinforcement (WOH Ph1)	10,000,000	10,000,000	10,000,000			
	L Goose-Starbucks 500 kV (WOH Ph2)	10,000,000					
	Paul- Troutdale 500 kV	10,000,000	10,000,000				
	Big -Eddy-Ostrander 500KV						
0001130	McNary-Brownlee 230 kV (PNW-ID)	10,000,000	10,000,000				
	Hatwai-Lolo 230 kV (PNW-ID)						
	McNary-Tap on Ashe-Marion 500 kV	10,000,000	10,000,000				
	Other Associated gen Integration	10,000,000	10,000,000				
0001131	NERC Criteria Compliance	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
0001135	Fire Suppression	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
0001137	System Reactive Facilities	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
0001138	Various Additions	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
0001032	Total Main Grid	325,000,000	257,250,000	185,250,000	210,000,000	210,000,000	10,000,000

		01/01/00 - FY 2004	01/01/00 - FY 2005	01/01/00 - FY 2006	01/01/00 - FY 2007	01/01/00 - FY 2008	01/01/00 - FY 2009
AREA & CUSTOMER SERVICE							
WO	Project Name						
0001149	Albany-Eugene Rebuild						
0001144	Kitsap Penin Reinf						
0001147	San Juan Cable Replcmt 69kV						
0001158	Salem-Grand Rd Recond						
0001153	Franklin Area Reinf (recond)						
0001154	Tanner						
	Red Mountain 115 kV Sub						
	Walla Walla 115/69 Bank Repl						
	SW Ore Coast (Bandon-Rogue)	3,211.7	3,381.4	3,412.0	3,227.3		
0001161	Goshen-Drummond Upgrade&Tx						
0001150	Trentwood 230/115kv bk/line			571.0	5,200.0		
	Fairview SVC						
	Vintage Valley						
	Port Angeles SVC						
	Santiam-Chemawa 230 Line#2						
	Hamey system 138 kV upgrade				2,211.5	5,300.0	
	Driscoll/Clatsop 230/115KV Tx				2,000.0	1,000.0	
0001163	Longview 230/115-kV Bank #2	100.0	550.0	3,375.0			
	Redmond 230/115KV Bank #2						
	Palisades-Snake River 115 line		1,000.0	3,400.0	3,375.0		
	Palisades-Goshen 161KV line/TX	1,000.0	3,400.0				
	East Omak 230/115KV Bank			571.0	5,300.0		
	Libby-Bonniers Ferry 115 Recond						
	Libby - Troy Line Purchase						
0001157	N. Idaho Reinforcement (Lib-Bonniers)	2,000.0	1,000.0	30,000.0			
	Midway-Grandview Recond						
	Substation X (U.S. Navy)						
0001168	Customer Service Items	1,000.0	3,400.0	3,400.0	3,400.0	1,000.0	1,000.0
0001034	Total Area & Customer Srvc	5,317.7	22,581.5	39,152.0	30,225.3	16,300.0	2,000.0
UPGRADES & ADDITIONS							
WO	Project Name						
0001246	System Controls	10.0	21.0	1.0	1,000.0	1,000.0	1,000.0
	Transmission System Development	1.0	1.0	1.0			
	Flathead Valley Reinf (RAS)		0.0	1.0			
0001249	Fiber Optics (Incls Terminations)	3,350.0	3,400.0	30,700.0	1,000.0	3,300.0	3,300.0
0001250	Misc Line & Sub Additions	3,000.0	3,400.0	3,300.0	3,000.0	1,000.0	3,000.0
0001038	Total Upgrades & Additions	6,461.0	6,822.0	35,002.0	5,000.0	25,300.0	25,300.0

		01/01/00 - FY 2001	01/01/00 - FY 2002	01/01/00 - FY 2003	01/01/00 - FY 2004	01/01/00 - FY 2005	01/01/00 - FY 2006
SYSTEM REPLACEMENTS							
WO	Project Name						
0001170	Nonelectric Plant Replcmnts	16,392.0	16,392.0	16,392.0	16,392.0	16,392.0	16,392.0
0001171	Transmission Line Replcmnts						
0001173	Substation Replcmnts						
0001174	System Protection Replcmnts						
0001175	Pwr Sys Cntrl Replcmnts						
	Total M3C, M4C, M5C, M6C	21,150.0	21,210.0	21,270.0	21,330.0	21,390.0	21,450.0
	Cellco upgrades	0.0	0.0	0.0	0.0	0.0	0.0
0001176	Tools and Equipment	1,319.0	1,319.0	1,319.0	1,319.0	1,319.0	1,319.0
0001170	Emergency Funds	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0
0001036	Total System Replacements	57,659.0	58,321.0	57,722.0	58,241.0	57,792.0	58,071.0
ENVIRONMENT							
WO	Project Name						
	PP&A--Fire Prot/Sec Contain		550.0	550.0	550.0	550.0	550.0
0001621	PP&A--PCB Capacitor Replac		1,000.0	1,000.0	1,000.0	1,000.0	1,000.0
0001622	PP&A--Restoration		0.0	0.0	0.0	0.0	0.0
	Total VR2C, VR4C, VR7C	1,300.0	1,550.0	1,550.0	1,550.0	1,550.0	1,550.0
	Cap ADP Equip--Environment	200.0	200.0	200.0	200.0	200.0	200.0
0001041	Total Environment (PP&A)	3,000.0	3,250.0	3,250.0	3,250.0	3,250.0	3,250.0
ALL OTHER DIRECT CAPITAL							
WO	Project Name						
0001258	Capital ADP Equipment	750.0	750.0	750.0	750.0	750.0	750.0
	Completion of Prior Yr Items	100.0	100.0	100.0	100.0	100.0	100.0
0001254	Cap-to-Exp Adjustments	(5,000.0)	(5,000.0)	(5,000.0)	(5,000.0)	(5,000.0)	(5,000.0)
	<i>Undistributed Funding (Reduction)</i>						
	Total All Other Capital	(4,150.0)	(4,150.0)	(4,150.0)	(4,150.0)	(4,150.0)	(4,150.0)
SUB TOTAL TBL CAPITAL (DIRECT)		215,359.0	223,421.0	222,222.0	223,091.0	223,492.0	223,451.0
INDIRECTS							
0001190	TSD Program Indirect	11,300.0	11,300.0	11,300.0	11,300.0	11,300.0	11,300.0
	TSD MS&A	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0
0001624	Support Services Cap Distribution	10,000.0	10,000.0	10,000.0	10,000.0	10,000.0	10,000.0
	Total TBL Indirects	22,300.0	22,300.0	22,300.0	22,300.0	22,300.0	22,300.0
AFUDC							
0001049	AFUDC	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0
	Total AFUDC	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0
CORPORATE OVERHEAD 1/							
0001185	Corporate Distributions	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0
0001186	Corporate Shared Services	100.0	100.0	100.0	100.0	100.0	100.0
0001188	Corporate Legal Support	0.0	0.0	0.0	0.0	0.0	0.0
	Total Corporate Overhead	1,100.0	1,100.0	1,100.0	1,100.0	1,100.0	1,100.0
SUB TOTAL TBL CAPITAL (INDIRECT)		24,400.0	24,400.0	24,400.0	24,400.0	24,400.0	24,400.0
TOTAL TBL CAPITAL		239,759.0	247,821.0	246,622.0	247,491.0	247,892.0	247,851.0

		01/01/2010	01/01/2011
MAIN GRID			
WO	Project Name		
0001108	E. Seattle Reinf (K-EL)		
0001109	N. Seattle Transf Reinf (SK)		
	Schultz-Blackrock 500 kV line		
	McNary-John Day 500 kV line		
	Low Mon-Starbucks 500 kV		
	McNary-Wallula 500 kV		
0001110	Schultz 500 kV series caps		
	Echo Lake-Monroe 500 kV		
	Coulee-Bell 500 kV (WOH Ph 1)		
	Olympia-White River & Coulee-Olympia		
	Line Relocations on Tribal Lands		
	Columbia Falls-Kerr Reconnector		
	Seattle Area 500/230 kV Bank		
0001116	Pearl 500/230 KV bank		
	Chemawa 230/115 kV Bank		
	Santiam-Bethel Tap 230 Line #2		
0001111	Olympia 230/115KV Bank #3		
	Olympia-Shelton 500KV		
	Fairmount Shunt Cap		
	Shelton-Fairmount 230KV line	2,800.0	2,800.0
0001122	Hanford-Ost. tap to Big Eddy		
0001120	N. Cross Cascades SC 500 KV		
	Ponderosa 500/230 KV bk #2		
	North Noxon Reinforcement (WOH Ph1)		
	L Goose-Starbucks 500 kV (WOH Ph2)		
	Paul-Troutdale 500 kV		
	Big -Eddy-Ostrander 500KV	2,800.0	2,800.0
0001130	McNary-Brownlee 230 kV (PNW-ID)		
	Hatwai-Lolo 230 kV (PNW-ID)		
	McNary-Tap on Ashe-Marion 500 kV		
	Other Associated gen Integration		
0001131	NERC Criteria Compliance	2,800.0	2,800.0
0001135	Fire Suppression	0.0	0.0
0001137	System Reactive Facilities	0.0	0.0
0001138	Various Additions	0.0	0.0
0001032	Total Main Grid	22,800.0	22,800.0

		00000000	00000000
AREA & CUSTOMER SERVICE			
WO	Project Name		
0001149	Albany-Eugene Rebuild		
0001144	Kitsap Penin Reinf		
0001147	San Juan Cable Replcmt 69kV		
0001158	Salem-Grand Rd Recond		
0001153	Franklin Area Reinf. (recond)		
0001154	Tanner		
	Red Mountain 115 kV Sub		
	Walla Walla 115/69 Bank Repl		
	SW Ore Coast (Bandon-Rogue)		
0001161	Goshen-Drummond Upgrade&Tx		
0001150	Trentwood 230/115kv bk/line		
	Fairview SVC		
	Vintage Valley		
	Port Angeles SVC		
	Santiam-Chemawa 230 Line#2		
	Harney system 138 kV upgrade		
	Driscoll/Clatsop 230/115KV Tx		
0001163	Longview 230/115-kV Bank #2		
	Redmond 230/115KV Bank #2		
	Palisades-Snake River 115 line		
	Palisades-Goshen 161KV line/TX		
	East Omak 230/115KV Bank		
	Libby-Bonners Ferry 115 Recond		
	Libby - Troy Line Purchase		
0001157	N. Idaho Reinforcement (Lib-Bonners)		
	Midway-Grandview Recond		
	Substation X (U.S. Navy)		
0001168	Customer Service Items		
0001034	Total Area & Customer Srvc		
UPGRADES & ADDITIONS			
WO	Project Name		
0001246	System Controls		
	Transmission System Development		
	Flathead Valley Reinf (RAS)		
0001249	Fiber Optics (Incls Terminations)		
0001250	Misc Line & Sub Additions		
0001038	Total Upgrades & Additions		

		OMB FY 2010	OMB FY 2011
SYSTEM REPLACEMENTS			
WO	Project Name		
0001170	Nonelectric Plant Replcmts	10,000.0	10,000.0
0001171	Transmission Line Replcmts		
0001173	Substation Replcmts		
0001174	System Protection Replcmts		
0001175	Pwr Sys Cntrl Replcmts		
	Total M3C, M4C, M5C, M6C	10,000.0	10,000.0
	Cellulo upgrades		
0001176	Tools and Equipment	5,000.0	5,000.0
0001170	Emergency Funds	10,000.0	10,000.0
0001036	Total System Replacements	25,000.0	25,000.0
ENVIRONMENT			
WO	Project Name		
	PP&A-Fire Prot/Sec Contain	500.0	500.0
0001621	PP&A-PCB Capacitor Replac	5,000.0	5,000.0
0001622	PP&A-Restoration	0.0	0.0
	Total VR2C, VR4C, VR7C	10,000.0	10,000.0
	Cap ADP Equip-Environment	5,000.0	5,000.0
0001041	Total Environment (PP&A)	15,500.0	15,500.0
ALL OTHER DIRECT CAPITAL			
WO	Project Name		
0001258	Capital ADP Equipment	500.0	500.0
	Completion of Prior Yr Items	500.0	500.0
0001254	Cap-to-Exp Adjustments	(5,000.0)	(5,000.0)
	<i>Undistributed Funding (Reduction)</i>		
	Total All Other Capital	(4,000.0)	(4,000.0)
SUB TOTAL TBL CAPITAL (DIRECT)		36,500.0	36,500.0
INDIRECTS			
0001190	TSD Program Indirect	10,000.0	10,000.0
	TSD MS&A	15,000.0	15,000.0
0001624	Support Services Cap Distribution	10,000.0	10,000.0
	Total TBL Indirects	35,000.0	35,000.0
AFUDC			
0001049	AFUDC	5,000.0	5,000.0
	Total AFUDC	5,000.0	5,000.0
CORPORATE OVERHEAD 1/			
0001185	Corporate Distributions	5,000.0	5,000.0
0001186	Corporate Shared Services	5,000.0	5,000.0
0001188	Corporate Legal Support	5,000.0	5,000.0
	Total Corporate Overhead	15,000.0	15,000.0
SUB TOTAL TBL CAPITAL (INDIRECT)		55,000.0	55,000.0
TOTAL TBL CAPITAL		91,500.0	91,500.0

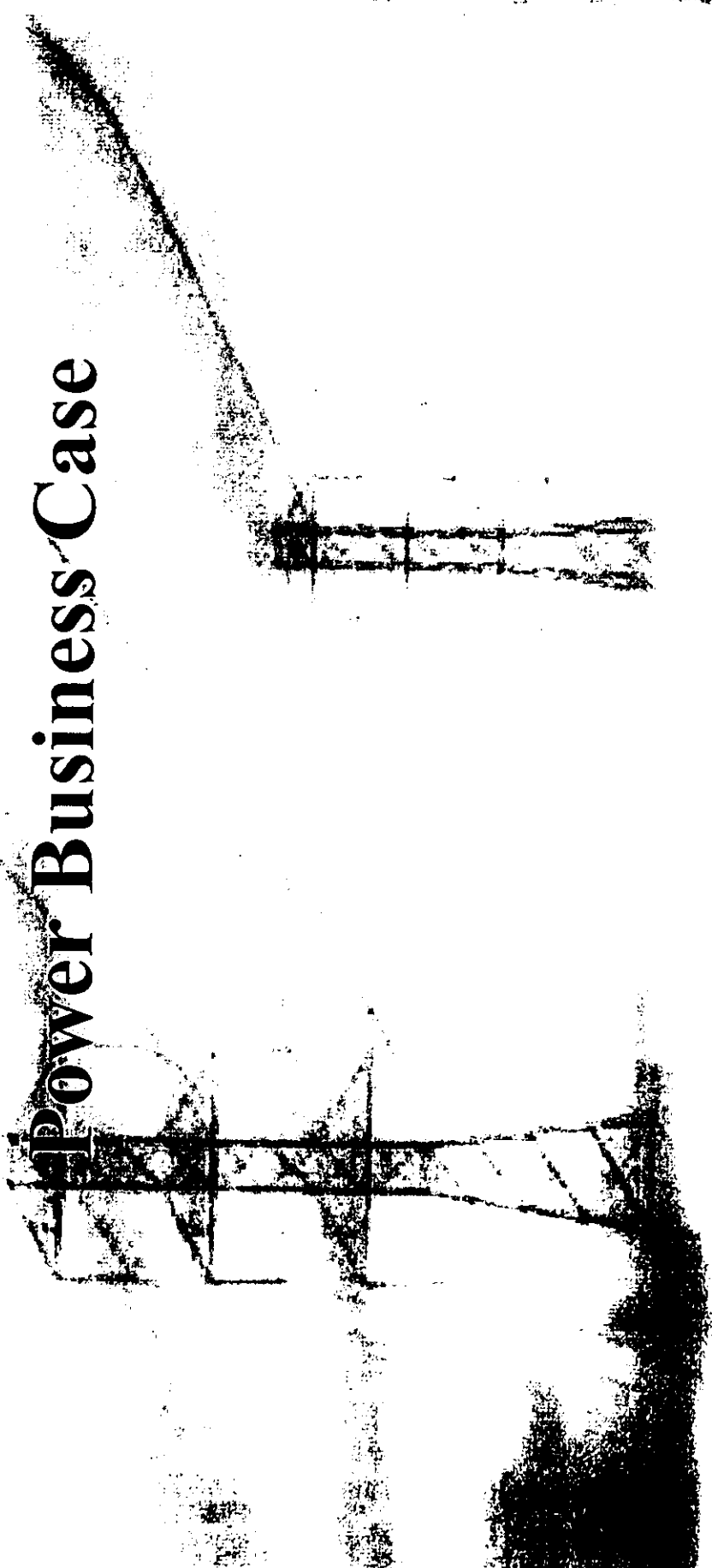
Attachment 4

Bonneville

Power Administration



Power Business Case





Power: Current System Conditions

- Bonneville, in coordination with the Corps of Engineers and the Bureau of Reclamation, has management responsibility for 31 hydroelectric facilities located throughout the Pacific Northwest.
- Due to an average age in excess of 45 years and limited investment funding prior to the mid-1990s, generation availability declined to 82 percent compared to an industry benchmark of 90 percent.
- In 1992, the National Energy Policy Act authorized direct funding by Bonneville of Corps of Engineers and Bureau of Reclamation operations & maintenance, and capital investments instead of through annual appropriations. Bonneville ratepayers, not U.S. taxpayers, pay for this direct funding.
- Through direct funding, and the close cooperation of the Corps and Reclamation, Bonneville uses its borrowing authority to make investments needed to restore generation availability and improve efficiency, eliminating demand on appropriations for power-related investments. Since the beginning of direct funding, Bonneville has significantly improved system performance - generation availability is up to 89 percent as of last year. This approach has been developed into the 1999 Asset Management Strategy of the Federal Columbia River Power System (FCRPS).



Need for Additional Investment

- Supplementary analysis, and experience with the system, has revealed additional investment needs above and beyond the levels originally planned under the Asset Management Strategy for the next two five-year periods.
- The first period additions include \$105 million for expansion of generation capacity at existing Federal hydro projects, \$15 million for increases in efficiency investments and \$135 million for hydro-generation improvements to increase project reliability and availability.
- With these improvements, generation availability will increase from 89 percent to 95 percent over the next 10-15 years.
- This, combined with new generation and additional efficiency improvements, should produce about 200 aMW of additional energy during the next rate period (FYs 2002-06), with another 200 aMW or more in the subsequent 5-year period.
- These investments return more than their cost, and exceed the 13 percent internal rate of return (IRR) used by Bonneville in evaluating hydro-generation investments. In fact, the additional infrastructure investments alone have a rate of return (ROR) of 23 percent. They are a critical part of Bonneville's efforts to relieve the energy crisis through increased power generation and improved reliability.



Power Business Line Review Process

- The capital investment review for the Power Business Line is a "bottoms-up" process involving both quantitative and qualitative analysis of proposed multi-year capital spending, and executive review and approval. The process has several steps covering several months each year.
- The steps are summarized below:
 - Each project or project area requiring capital submits a detailed proposal addressing project purpose, alternatives considered, performance measurement, and results from financial and non-financial analysis. Internal analysis frequently is validated through statistical benchmarking to other hydro systems and review by independent contractors retained to assess investment needs.
 - The financial analysis covers annual project costs/benefits, present values and rates of return.
 - The non-financial analysis evaluates the degree to which each project supports the Agency's Strategic Business Objectives, and the Business Line's Balanced Scorecard Strategic Objectives, as well as other qualitative areas such as public benefits, system streamlining improvements, and facilitation of deregulation.
 - The Power Business Line's project-specific, multi-year capital investment proposals then go the business line's Capital Review Panel for review and approval. Following that step, the projects are consolidated into a business line capital investment portfolio for final review and approval by Corporate executive management.



Major Categories of Investment Activities

SUMMARY (\$ millions)	FY 2001					FY 2002					FY 2003					FY 2004					FY 2005					FY 2006					Total FY 2002-06	Total FY 2007-11
Small Capital	10.4					10.5					10.7					10.9					11.2					11.5				54.8	62.1	
Generation Efficiency	3.3					17.4					18.2					25.0					34.6					37.4				132.5	96.1	
Hydro Optimization	4.4					5.0					6.0					8.0					9.0					10.0				38.0	28.0	
Reliability Investments	55.4					58.0					55.1					57.2					55.6					54.3				280.2	288.8	
Generation Expansion	0.0					14.1					27.0					15.9					20.0					28.0				105.0	186.0	
TOTAL	\$73.6					\$105.0					\$117.0					\$117.0					\$130.4					\$141.2				\$610.6	\$661.0	



The projected investments result in benefits, specifically in incremental energy gains in average megawatts, as shown below. This energy gain was used to evaluate the rate of return that is a critical part of the justification for the investment program.

INCREMENTAL ENERGY ACQUIRED)									
	FY-2001	FY-2002	FY-2003	FY-2004	FY-2005	FY-2006	Total FY 2002-06	Total FY 2007-11	
Small Capital	*	*	*	*	*	*		*	
Generation Efficiency	0.0	10.0	10.0	15.4	22.6	22.2	80.2 aMW	76.9 aMW	
Hydro Optimization	8.0	6.0	9.1	18.1	21.2	21.2	75.6 aMW	84.7 aMW	
Reliability Investments	9.0	28.7	27.3	27.3	32.2	33.0	148.5 aMW	198.4 aMW	
Generation Expansion	8.0	0.5	6.1	3.8	4.3	11.1	25.8 aMW	33.0 aMW	
TOTAL	25.0	45.2	52.5	64.7	80.3	87.5	330.2 aMW	392.9 aMW	

* Energy acquired is included in other areas shown below



Size of FCRPS Hydro System

- The hydroelectric assets of the FCRPS constitute 80% of the generation sold by Bonneville. This represents roughly half of the electricity generated in the entire Pacific Northwest. The investments identified above will serve to increase the efficiency of the system, and extend its life so the Pacific Northwest and West Coast will continue to receive low cost power for years to come.
- While the investment levels are significant, it is important to consider the entire FCRPS to which they will be applied. The FCRPS is one of the largest hydroelectric generation systems in the world at over 22,000 MW of installed capacity producing on average 8,900 aMW. When compared to other hydroelectric utilities' investments, the FCRPS investment is at the low-end range of capital investments (see table below). The investment rates per installed generation capacity (\$/MW) by year are shown in the following table alongside other utilities overall rates.



The FCRPS program is at the low end of the range of capital investments compared to other hydro utility programs. See table below.

The FCRPS is one of the largest hydro systems in the world at over 22,000 MWs of capacity producing an average of 78 million megawatt hours

INVESTMENT PER INSTALLED CAPACITY (\$/kW)	EY 2001	EY 2002	EY 2003	EY 2004	EY 2005	EY 2006	Total FY 2002-06	Total FY 2007-11
• FCRPS (22,000 MW)	3.27	4.04	4.00	4.49	4.90	5.03	\$ 4.49 /kW	\$ 4.22 /kW

Representative Hydro Utilities Benchmark

BC Hydro	75000. MW
Ontario Power Generation	9746. MW
Vattenfall (Sweden)	7200. MW
Duke Power	7514. MW
TVA	1634. MW
Seattle City Light	2740. MW
	1051. MW

> \$ 7.00 /kW
\$ 6.16 /kW
\$ 16.67 /kW
\$ 4.66 /kW
\$ 16.52 /kW
\$ 14.20 /kW
\$ 7.42 /kW



Conclusion - Investment in FCRPS

- The Federal Columbia River Power System is the environmentally cleanest and most renewable power supply on the West Coast.
- The economic investments go beyond paying for themselves, both in direct internal rates of return and indirectly through economic stimulus in the region.
- The added generation capability and availability mitigates the Pacific Northwest and West Coast energy crisis both now and in the future while at the same time tempering price volatility on the wholesale market through low cost-based rates.



Why Bonneville Funds Conservation

■ Bonneville's Statutory Conservation Mandate: The PNW Electric Power Planning and Conservation Act (Public Law 96-501) requires Bonneville first to acquire all cost effective conservation when developing power resources to meet future loads as the Administrator determines are consistent with the NW Power Planning Council's Power Plan (6.(a)(1)).

The NW Power Planning Council's next Power Plan specifies that Bonneville's share of the regional, cost-effective conservation target will be about 220 aMW by 2006. In addition, the Council's Plan further estimates that Bonneville's target will be another 250 aMW of conservation in the 2007 to 2011 period. Bonneville has committed to meet or exceed the Council's targets. Bonneville anticipates that between 100 and 225 aMW of this amount will be acquired under the Augmentation Strategy using Bonneville's Treasury borrowing authority.

Bonneville buys conservation at the lowest possible cost to augment its resource portfolio. Conservation purchases are designed to offset power purchases that Bonneville would have to make absent the conservation savings achieved.



Proposed New Conservation Investment

- Bonneville's proposed new Capital Investment in Conservation is made up of two major parts: (1) Conservation as part of Augmentation; and (2) Energy Web
- Conservation investments as part of Augmentation (ConAug) are designed to offset some of the power purchases that Bonneville would have to make to meet its load commitments during the next Rate Period. ConAug offers several ways for customers to participate in regional energy conservation. The capital budget for ConAug overall is based on an average cost per megawatt acquired, but budgets are not broken down to component programs beyond FY2002. Since Bonneville is negotiating program features and customer-specific deals, individual contracts and types of measures are not known far in advance. Bonneville is setting cost targets that will change as prices on the market changes.
- ConAug program components include (1) Request for Interest in Reducing Load Through Conservation (IRLC), which will result in customer proposals in the areas of Residential Weatherization, Commercial Lighting and HVAC, Industrial Processes and Lighting, and Irrigated Agriculture; (2) Residential Compact Fluorescent Lighting; (3) "Vending Miser", a program to reduce energy use in regional refrigerated vending machines; and (4) Federal "Quick Start", a program to help Federal installations in the Region reduce energy use.

New Conservation Investment (cont.)

- In addition to ConAug, Bonneville also is exploring how best to integrate demand side management, distributed generation, and other "cutting edge" technologies into its resource portfolio. This effort, Bonneville's "Energy Web" initiative, includes a number of projects to facilitate the integration of these advanced technologies into practical utility and consumer applications.
- The following table summarizes Bonneville's new Conservation Investments:

SUMMARY (\$ millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	Total FY	
						2002-06	2007-11
Con Aug	\$ 24.0	\$ 40.2	\$ 58.0	\$ 73.8	\$ 94.0	\$ 290.0	\$ 200.0
* IRLC	\$ 13.5	\$ 16.2	N/A	N/A	N/A	\$ 29.7	N/A
* Regional CFL	\$ 3.5	N/A	N/A	N/A	N/A	\$ 3.5	N/A
* Vending Miser	\$ 4.7	N/A	N/A	N/A	N/A	\$ 4.7	N/A
* Fed Quick Start	\$ 2.1	N/A	N/A	N/A	N/A	\$ 2.1	N/A
Energy Web	\$ 2.0	\$ 2.0	\$ 2.0	\$ 2.0	\$ 2.0	\$ 10.0	\$ -
TOTAL	\$ 26.0	\$ 42.2	\$ 60.0	\$ 75.8	\$ 96.0	\$ 300.0	\$ 200.0



Bonneville's Role in the Private Public Conservation Partnership

• Bonneville's capital program is a small but key piece of the Northwest Regional Power Plan and the regional conservation program. Bonneville is responsible for less than half of the region's conservation and our capital program represents less than 25% of the total regional conservation investment called for in the plan. Bonneville's capital program is $\frac{1}{2}$ of the Agency total conservation budget (the other half is expensed - paid for directly from current revenues). The Regional Plan calls for additional savings of 1079 aMW from 2001 through 2010. Bonneville's share over the next 10 years is 467 aMW, of which up to 225 aMW will be financed with debt. Bonneville's leadership in this private/public partnership is essential.

• Bonneville energy efficiency programs are implemented by the private business sector. Bonneville provides funding to consumers to pay for conservation that would not be done without some support. Funding flows through Bonneville's customer utilities that pay for work done by local companies that install measures in homes and businesses. The businesses that provide conservation goods and services range from engineering and consulting firms, to "mom and pop" weatherization installers, from window and insulation manufacturers to companies that manufacture and install efficient industrial equipment.

In addition to the companies that benefit, the conservation resource strategy results in additional jobs compared to construction of thermal generation. A study of Northwest conservation programs done by Charles River Associates, of Boston Massachusetts, found that energy efficiency conservation programs employed approximately 53 people in the Pacific Northwest per million dollars spent, compared to 33 people employed on construction of alternative thermal generation.



Additional Reasons for Bonneville's Investing in Conservation

- A diverse portfolio of resources that includes conservation provides a more reliable approach to meeting Bonneville's load obligations. Long-term investments in energy efficiency provide a "shock absorber" for the FCRPS against future resource uncertainties. During periods of price volatility, conservation also helps reduce financial risk associated with relying on the market for energy purchases in the future, because it keeps on producing at the original cost incurred.
- Investments in conservation stretch the existing resource base further. Also, strategic conservation can help Bonneville manage capacity problems and other constraints on existing transmission facilities.
- Numerous local, regional and national surveys indicate that rate payers support conservation and other non-polluting resources because they want a clean, healthy environment. Based on the NWPP's mix of resources in QY 2000, the pollution savings per aMW would be 4 tons of SO₂, 10.6 tons of NO_x, and 4494.4 tons of CO₂.
- State and local officials in the PNW support Bonneville's augmentation efforts only in the context of a robust conservation initiative. (See 6/4/01 letter from the four NW governors, etc.).
- "Conservation and energy efficiency are important elements of a sound energy policy." National Energy Policy, Chapter 4: *Using Energy Wisely – Increasing Energy Conservation and Efficiency* (May 2001).

Attachment 5

G9 Project Summaries

1. Puget Sound Area Additions. (Kangley-Echo Lake 500-kV line, SnoKing 500/230-kV bank, etc.)

Background

This project is a critical part of the effort to mitigate system constraints in the Puget Sound area and enables BPA to meet Canadian Entitlement Treaty obligation and serve increased load in the Puget Sound Area. The obligation to return the Canadian Entitlement increases from today's (August, 2001) requirement of 768 MW to 1150 MW in April, 2003. The obligation beyond April 2003 is likely to fluctuate between 1100 MW and 1500 MW.

This project will be coordinated with the addition of another 500/230-kV transformer bank (identified as G-10) in the south Puget Sound area in the 2005-2006 time-frame. Additional work will include upgrading circuits to support load service and transfers with Canada.

Limiting Outages Addressed

- Raver-Echo Lake 500 kV line
- Existing 500/230 kV transformers at Monroe, Maple Valley, Tacoma & Covington

Benefit – Load Area Support and Interregional Transfers

This project will increase the system load carrying capacity and increase the south-to-north transfer capability in this portion of the Puget Sound area by approximately 600 MW. Without this project neither treaty obligations nor transmission agreements (load service) with Puget Sound area utilities will be met. The addition of the Monroe-Echo Lake 500-kV No.2 addresses capacity reinforcement north of Echo Lake (see item 8).

Business Case

The primary uses of this project are load service and Canadian Entitlement return. The estimated time for cost recovery at current rates is between X and Y years.

Risk

The date of need for the project would be delayed if Canadian Entitlement return was purchased within the US, or if low cost generation developed to serve Puget Sound area loads. These are considered to be low risk factors.

Project Description

- Build approximately 9 miles of new 500-kV line from Echo Lake to a point on the Schultz-Raver 500 kV line (near the community of Kangley). This will create an Echo Lake – Schultz 500 kV line. The section between the tap point and Raver will be run open.
- Move the existing Monroe-Sammamish-SnoKing 230-kV tap to the Monroe-Echolake 500-kV line and add a new 500/230-kV transformer at SnoKing.
- Tap the Bothell-Sammamish 230-kV line into SnoKing.
- Remove the Horse Ranch tap from the Monroe-Snohomish 230-kV lines and re-terminate the Horse Ranch line directly to the Snohomish 230-kV bus.
- Reconfigure Bothell substation to add the 5th bus section.
- Future work will involve adding another transformer bank in the Puget Sound area in the 2005-2006 time frame.

Alternatives Considered

- Addition of a 2nd Raver-Echo Lake 500 kV line.
- Conversion of Covington-Maple Valley 230 kV line to 500 kV.
- Same as proposed project but install a 500/230 kV bank at Covington or Maple Valley instead of SnoKing
- Covington – Berrydale 230 kV line

Energization Date: Fall 2002

Estimated Cost: \$45 M (loaded)

2. North of Hanford Project (Schultz – Black Rock 500-kV line and Black Rock substation).

Background

This project relieves congestion on the North of Hanford (NOH) path (Vantage-Hanford 500-kV and Coulee-Hanford 500-kV lines) and along the I-5 corridor during spring and summer months when there are high north to south imports from Canada coupled with high Upper Columbia generation. Since the NOH and North of John Day (NJD) paths are in series, relieving congestion across the NOH path will allow the NJD path to be further utilized. This will facilitate greater use of the California Oregon Intertie (COI) by reducing schedule curtailments as well as helping integrate new generators in the northern part of the Northwest transmission system. The Schultz-Black Rock line will enable BPA to meet its Biological Opinion commitments for fish operation, and adds operational flexibility during low water years.

Limiting Outages Addressed

- Coulee-Hanford 500-kV line
- Vantage-Hanford 500-kV line
- Hanford-Ostrander 500-kV/Hanford-John Day 500-kV DLL

Benefit – Congestion Relief

This project will increase the transfer capability across the North of Hanford cutplane by approximately 600 MW and reduce or eliminate N-1 outage Remedial Action Scheme (RAS) requirements. The increased capacity will (1) reduce limitations on COI transfers, particularly at times of reduced lower Columbia generation due to fish spill, and (2) allow greater access of generation north of this cut-plane to Idaho, Nevada, California and loads in the Northwest, and (3) reduce loading on the Raver-Paul 500-kV line by about 170 MW.

Business Case

The primary use of this project is North to South network transfers and provide additional capacity to integrate generation on the I-5 corridor. Also, BPA TBL made a commitment in the 2000 Biological Opinion to construct this project to provide future flexibility to accommodate potential spill increases on the Lower Columbia River. The estimated cost recovery of this project at current rates is between X and Y years.

Risk

The date of need for the project would be delayed if the need for north to south transfers were reduced. However, BPA has received requests for transfers exceeding the capacity of this path. This is considered to be a low risk project.

Project Description

- Build a new 500-kV line (approximately 62 miles) from Schultz substation near Ellensburg, WA to a new substation called Black Rock southwest Hanford area.
- Develop a new breaker and half substation called Black Rock, which will consist of 8 breakers. The Hanford-Ostrander 500-kV and Hanford-John Day 500-kV lines will be looped into Black Rock substation which will eliminate system problems caused by the loss of these lines.
- Re-terminate the Sickler-Schultz 500-kV into a new bay at Schultz substation to eliminate several 500-kV line crossing east of Schultz.

Alternatives Considered

- Schultz- Hanford 500 kV line
- Schultz – Ashe 500 kV line

Energization Date: Fall 2004

Estimated Cost: \$105-110 M (loaded)

3. West of McNary Project (McNary-John Day 500-kV line)

Background

This project is required to provide firm transmission service to new generator additions near the McNary and Lower Monumental area. The existing transfer capability across the West of McNary path is fully utilized with the addition of the Hermiston Power Project. Any new generation addition in the area requires a new transmission line to the west from McNary. There are several new generation projects proposed in this area.

Addition of this new line would accommodate the integration of Starbuck (1200MW) and Wallula (1300 MW) generating plants. This would enable the delivery of much needed energy to westside load centers.

Limiting Outages Addressed

- Coyote Springs – Slatt 500-kV line
- McNary-Coyote Springs 500-kV
- Slatt-Buckley 500-kV line
- Slatt-John Day 500-kV line
- Ashe-Slatt-John Day 500-kV lines

Benefit - Generation Integration

This project will increase the transfer capability across the West of McNary and West of Slatt defined paths by approximately 1200 MW. Without this project it would not be possible to grant transmission service to any new generation addition in the area.

Business Case

This Project along with the G-4 (Starbuck Generation) and G-5 (Lower Monumental and McNary Area Generation) will provide firm transmission for both Starbuck (1200 MW) and Wallula (1300 MW) generating projects. The primary use of this project is generation integration. The estimated cost recovery of this project at current rates is between X and Y years.

Risk

The need for this project is tied to requests for generation east of McNary. Indications are that an additional line west from McNary will be needed to service all requests. This is considered to be a low risk project.

Project Description

- Build approximately 70 miles of 500-kV line from McNary 500-kV substation to John Day substation. The line will be routed through the north side of the Columbia River. This requires two river crossings, at McNary and John Day.
- Expand and configure McNary 500-kV substation from a ring bus to a breaker and half layout.
- Add breakers at John Day for the termination of the new line.

Alternatives Considered

- An option to build approximately 45 miles of 500 kV transmission line from McNary 500 kV substation to tap an existing Ashe - Marion 500 kV line was considered.

Energization Date: Fall 2004

Estimated Cost: \$115-120 M (loaded)

4. Starbuck Generation (Low Mon – Starbuck 500-kV line & Starbuck 500-kV Substation)

Background

This project is required to integrate 1200 MW of new generation proposed at Starbuck site, 15 miles east of Lower Monumental substation. This project need is contingent on the building of the Starbuck generation facility and switchyard.

Limiting Outages Addressed

- Starbuck-Little Goose #1 & Lower Monumental -- Little Goose #2 500-kV DLL

Benefit – Generation Integration

This project will allow interconnection of 1200MW of generation at Starbuck.

Business Case

This Project will provide firm transmission for both Starbuck (1200 MW) generation. The primary use of this project is generation integration. The estimated cost recovery of this project at current rates is between X and Y years.

Risk

The need for this project is tied to requests for generation at Starbuck. Proceeding on this project is tied to a commitment to proceed on the Starbuck generation. This is considered to be a low risk project.

Project Description

- Construct approximately 15 miles of new 500-kV line from the new Starbuck substation to Lower Monumental substation.
- At Lower Monumental 500-kV yard, add two circuit breakers, four motor operated disconnect switches, and support equipment to configure the yard to a full breaker and half layout.
- Develop a new Starbuck substation to integrate the generation through two powerhouse lines and loop in the existing Little Goose to Lower Monumental 500-kV No.1 line. The substation will be laid out as a full breaker and half with a total of 8 breakers.

Alternatives Considered

Building 15 miles of 500-kV line from Starbuck radially to Lower Monumental substation. This option does not require a separate Starbuck substation.

Energization Date: Fall 2004

Estimated Cost: \$25-30 M (loaded)

5. Lower Monumental and McNary Area Generation (Smiths Harbor - McNary 500-kV line and Smiths Harbor substation).

Background

This project is required to integrate 1300 MW of new generation proposed by Newport at Wallula Junction. This project need is contingent on the building of the Newport generation facility and switchyard at Wallula. The official name for the station at Wallula Junction will be Smiths Harbor Substation.

Limiting Outages Addressed

- Loss of the McNary – Smiths Harbor 500 kV line.

Benefit - Generation Integration

This project will allow integration of 1300MW of generation at Smiths Harbor.

Business Case

This Project will provide firm transmission for Wallula (1300 MW) generation. The primary use of this project is generation integration. The estimated cost recovery of this project at current rates is between X and Y years.

Risk

The need for this project is tied to requests for generation at Wallula Junction. Proceeding on this project is tied to a commitment to proceed on the Wallula generation. This is considered to be a low risk project.

Project Description

- Construct approximately 30 miles of new 500-kV line from the new Smiths Harbor substation to McNary substation.
- Develop a new 500-kV switching station using breaker and half scheme at Smiths Harbor and loop in the existing Lower Monumental – McNary line.
- Add two 500-kV breakers at McNary yard to terminate the new line.

Alternatives Considered

- Re-build approximately 30 miles of the existing Lower Monumental-McNary 500 kV line.
- Build approximately 30 miles of the 500 kV line radial to McNary substation without connecting to the existing Lower Monumental - McNary 500 kV line at Smiths Harbor.

(Note: The two alternatives do not require a separate Smiths Harbor 500 kV substation)

Energization Date: Fall 2004

Estimated Cost: \$35-40 M (loaded)

6. Cross Cascades North (Schultz Series Capacitors)

Background

This project is required to prevent voltage instability in the Puget Sound area during abnormal cold winter peak loads. Winter peak loads are growing about 1.8% annually. For this condition, without Schultz series capacitors, the Puget Sound area is at risk of voltage collapse leading to significant load loss for outages of 500-kV lines feeding the Puget Sound area. This problem will be further aggravated by the down-stream benefits return obligation to Canada. Since the area has become saturated with shunt compensation, the next alternative is to build a new cross-Cascade Mountain transmission line from the Grand Coulee area into the Puget Sound area. This problem will be further aggravated by the down-stream benefits return obligation to Canada. The Puget Sound Area has come to near operational limits by using shunt compensation. Construction of this project delays need for the next cross-Cascade reinforcement (see Alternatives Considered).

The next step after the series capacitor installation could be an upgrade of a 115-kV line to a 230-kV operation between the Mid-Columbia and the Puget Sound area. This would further delay construction of a new cross Cascade 500-kV transmission line.

Limiting Outages Addressed

- Chief Joseph-Monroe 500-kV line.

Benefit – Load Area Service

This project will increase the Cross-Cascades North transfer capability by 300 MW to serve the Puget Sound Area load. Without this project it would be necessary by 2003 to trip off load in the Puget Sound area under abnormal cold winter peaks for N-1 outages.

Business Case

The primary use of this project is load service and Canadian Entitlement return. The project will also delay the need for the next cross-Cascades line. The estimated cost recovery of this project at current rates is between X and Y years.

Risk

The date of need for the project would be delayed if Canadian Entitlement return was purchased within the US, or if low cost generation developed to serve Puget Sound area loads. These are considered to be low risk factors.

\Project Description

- Add two 500-kV series capacitors (19 ohms each) at Schultz substation in the Schultz-Echo Lake #2 and Schultz-Raver #1 500-kV lines.

Alternatives Considered

- Shunt capacitor additions: The area is saturated with shunt compensation and is near operational limits for voltage stability.
- Build new Chief Joseph-Monroe 500-kV #2 line. The estimated cost of this line is more than \$200 Million.
- Rebuild the 345-kV line between Rocky Reach and Maple Valley to a 500-kV double circuit line. Construction of this line would have an environmental (visual) impact along Interstate 90 corridor. The cost of this construction will be more than \$350 Million.

Energization Date: Fall 2003

Estimated Cost: \$25 M (loaded)

7. Celilo Modernization

Background

After an extensive public review process, BPA has agreed with its partners at the Los Angeles end to a long-term commitment to keep the HVDC Intertie at the present transfer capability of 3100MW. The Intertie was built more than 30 years ago and the mercury arc valves are coming to the end of their design life. Operators of the Los Angeles end have already contracted to modernize their terminal. Without replacement by BPA, capacity would be reduced to 1100 MW. The valve replacement and related control and protection modifications will improve the efficiency, compatibility, reliability and maintainability of the HVDC facility. It will also provide greater operating flexibility, thus reducing high operating and maintenance costs. Replacement of the control system with the same manufacture will provide one control philosophy, one set of spare parts, one product line to provide training for and will result in one DC system from Celilo to Sylmar. This upgrade will coincide with the rebuild of the southern terminus at Sylmar in southern California.

Benefit – Interregional Transfers

This project enables maintaining the capability to transfer up to 3100 MW between the Northwest and Southern California in coordination with similar steps being undertaken at Sylmar. Without this project HVDC transfers would be limited to 1100 MW once it is no longer possible to maintain existing mercury arc valves. BPA support of this project was contingent on capacity requests requiring more than 1100 MW.

Business Case

The primary use of this project is for interregional transfers. A public review process indicated a 20-year benefit for project G-9 in excess of \$120 M¹. This is about \$5M less benefit than the alternative of maintaining the existing mercury arc converters for 15 years (an optimistic assumption) followed by a derate to 1100 MW. Project G-9 has the advantage of retaining the full Celilo-Sylmar HVDC line capacity at 3100 MW and

¹ This does not include prior indebtedness incurred or prior revenues received.

removes the uncertainty as to likely mercury arc valve life. Current estimates of valve life are in the range of 5-10 years.

Risk

The estimated use of this project is based on past projections. Recent use has increased over this to serve California needs resulting from Path 15 constraints. A reduction in future use of the HVDC tie would reduce the benefits of this project. Based on the continuing need for resources to serve California and the construction of generation resources in the NW targeted for this purpose this is considered to be a low risk project.

Project Description

- This project will consist of the replacement of the mercury arc valves (groups 1 through 6) with solid state thyristor valves including cooling systems. This effort will also require the replacement of ancillary equipment such as the control and protection systems and mechanical and electrical facilities.

Alternatives Considered

- Maintain DC Intertie at 3100 MW by maintaining mercury arc valves for 15 years and then reduce to 1100MW.
- Maintain DC Intertie at 3100 MW by maintaining mercury arc valves and then derate to 1100 MW by October 2003.

Prior Alternatives Considered

- Maintain DC Intertie at 3100 MW by investing \$100M, which would include rebuilding the entire Celilo Converter station.
- Maintain mercury arc valves for 15 years and then reduce DC Intertie to 1650 MW.
- Replace mercury arc valves at Celilo with used LADWP equipment.

Energization Date: Fall 2003

Estimated Cost: \$50 M (loaded)

8. I-5 Corridor Generation Additions (Monroe – Echo Lake #2 500-kV Line)

Background

This project will: (1) maintain sufficient capacity to allow expected bi-directional interchange of power between the PNW and Canada (including The Canadian Entitlement Return); (2) increase load serving capability in the Puget Sound area by reinforcing the NW Washington transmission system to insure reliable operation; and (3) allow integration of new generation.

Limiting Outages Addressed

- Echo Lake-Monroe 500 kV line No. 1

Benefit – Load Area Support and Interregional Transfers

This project will increase in this portion of the Puget Sound area the transfer capability between PNW and Canada by approximately 600 MW in the south-to-north direction and approximately 850 MW in the north-to-south direction.

Seattle City Light has indicated that they plan to utilize their Maple Valley-SnoKing-Bothell 230 kV lines for load service sometime in the future. Addition of the Monroe-Echo Lake 500 kV line will significantly reduce the loading on these and other lines, thus allowing more capacity for load service.

This project will also add reliability margin to the system.

Business Case

The primary uses of this project are load service, Canadian Entitlement return and north to south transfers. The estimated time for cost recovery of this project at current rates is between X and Y years.

Risk

The date of need for the project may be delayed if Canadian Entitlement return was purchased within the US, if low cost generation developed to serve Puget Sound area loads and if need for north to south transfers is reduced. These are considered to be low risk factors.

Project Description

- Construct approximately 32 miles of a new single circuit 500 kV line between BPA's Echo Lake substation and Monroe substation.
- Add terminal facilities at Monroe and Echo Lake Substations to terminate the new line.
- To meet the WSCC N-2 Reliability Criteria for simultaneous multiple-circuit outage (N-2) it is recommended that this line be constructed on a separate ROW, at least 1200 feet from the existing ROW.

Alternatives Considered

- Rebuild the Maple Valley-Monroe 230 kV line to 500 kV operation.
- Build from Echo Lake to a tap on the Chief Joseph-Monroe 500 kV line. This tap point is east of Monroe.
- Modify the WSCC reliability criteria that pertains to common mode outages

Energization Date: Fall 2005

Estimated Cost: \$90 M (loaded)

9. West of Hatwai Additions (Bell-Coulee 500 kV line, 500 kV series compensation, 230 kV system upgrades)

Background

These facilities are required to relieve congestion across the West of Hatwai (WOH) cut-plane in Eastern Washington. The new facilities will relieve the constraint between eastern generation facilities and west-side load centers within the Pacific Northwest.

Historically, the West of Hatwai transmission path has been rated at 2800 MW. The WOH path is fully subscribed with firm obligations from generation east of the cut-plane. Although this path has experienced congestion in the past, typically it has been managed on an operational basis and has not caused severe resource curtailments. Recent load reductions at the Kaiser Mead aluminum plant (Spokane, Washington) and at Columbia Falls Aluminum Company (Kalispell, Montana) have increased transfers across the West of Hatwai cut-plane by approximately 800 MW. Since these loads are east of the cut-plane the energy that used to serve them did not have to flow across the WOH cut-plane. Now that the aluminum smelters are shut down, the excess energy flows across the WOH cut-plane because of the load / resource imbalance.

Summer 2001 system operation showed that this increased flow could not be served by existing transmission capacity when using standard operating practices to mitigate the limitations. The congestion caused by these load reductions as well as strict adherence to reliability standards prevented much needed resources east of the cut-plane to reach the load centers along the West Coast and California. These constraints caused economic hardship due to the curtailment of resources and the high cost of replacement energy.

In an operational attempt to minimize these impacts, temporary remedial action schemes (RAS) were implemented to increase transfer capability back to historic limits. These new RAS schemes include dropping an additional 800 MW of generation (bringing the total generation dropping to more than 2400 MW) and sectionalizing key load service transmission facilities. We consider the RAS to be short-term operating remedies which have increased the exposure to load loss and uneconomic curtailments.

Limiting Outages Addressed

- Taft-Dworshak 500 kV outage.
- Dworshak-Hatwai 500 kV outage.
- Hatwai-Lower Granite 500 kV outage.
- Taft-Bell 500 kV outage.
- 230 kV line outages between Bell and Coulee substations.
- 230 kV Bus outages

As a result of facility over loads caused by these outages, the WOH transfer capability may be limited to levels substantially below present firm obligations. This reduction in transfer capability also limits the ability to integrate additional generation resources east

of the cut-plane. Without aggressive remedial actions, these outages result in thermal over loads on the underlying transmission system and may also cause transient stability problems that can impact the entire West Coast.

Benefits – Congestion Relief

These proposed projects would eliminate the present bottleneck, enhance open access, encourage competitive generation, and provide additional customer choice. The addition of these new facilities will increase the West of Hatwai transfer capability by approximately 1500-2000 MW since the temporary remedial action schemes added this Summer are not intended to be used as part of a long-term solution for WHO congestion relief. Without these facilities firm transfer agreements cannot be supported, excessive remedial actions are required, and transfer curtailments will continue to be necessary. Specific system benefits are listed below:

1. Load Service Obligations west of the West of Hatwai cut-plane

- Maintains current obligations
- Provides for future obligations

2. BIOPS Commitment

- Supports 2000 Fish BIOP by providing flexibility to spill water on the lower Snake hydro projects

3. Generation Integration

- Supports open access (Order 888 & 889)
- Helps facilitate integration of new resources east of the cut-plane
- May facilitate integration of resources in Wyoming and the MAPP region and allow the energy to be delivered to the load centers within WSCC

4. Service Requests

- Supports open access (Order 888 & 889)

5. Reliability / Societal

- Reduces or eliminates generator dropping requirements
- Eliminates transmission line tripping
- Reduces exposure to re-dispatch
- Minimizes exposure to reduced generation caused by low hydro conditions. When the existing hydro generation is reduced the available generator dropping is reduced.

6. O & M

- Allows required maintenance on parallel facilities without significantly reducing transfer capability
- Reduces equipment loss of life – less thermal stress, reduces line tripping, reduces or eliminates generator tripping

Business Case

The primary use of this project is for interregional transfers from the Montana area. The estimated cost recovery is between X and Y years.

Risk

This project is needed to provide additional transmission capacity west of Spokane to offset capacity reductions caused by load growth in the Spokane area and shutdown of system load at the Kaiser and Columbia Falls aluminum plants. This path is fully subscribed today with request for additional service. Additional wheeling service is expected to help offset project cost. This project will also provide flexibility for outages and other system changes such as long term shutdown of the aluminum plants.. BPA TBL also made a commitment in the 2000 Biological Opinion to construct this project to provide future flexibility to accommodate potential spill increases on the Lower Snake River. For these reasons this is considered to be a low risk project.

Project Description

BPA proposed the following transmission projects to mitigate the WOH problem.

Phase 1

- The plan of service is to remove one of the Bell-Grand Coulee 115 kV lines and construct a new 500 kV line of approximately 83 miles of new 500 kV transmission line from Bell substation to Grand Coulee substation in its place.
- Construct a 500 kV switch yard at Bell consisting of 2 or 3 bays.
- Add a 500 kV line terminal at the USBR Grand Coulee substation.
- Add series capacitors at Bell Substation in the Taft-Bell 500-kV line (50%/25.13 ohms).
- Add series capacitors at Dworshak Substation in the Taft Dworshak 500-kV line (50%/28.05 ohms).

The new Bell-Coulee 500 kV line will be located adjacent to the existing Bell-Coulee 230 kV double circuit line. The present WSCC criteria require no cascading for credible common mode loss of three or more lines on a transmission corridor. Changes in the NERC/WSCC Criteria are under review. If required, mitigation can be accomplished by implementing a RAS scheme.

Phase 2

In addition to the initial project G9, other reinforcements are required on the 230 kV system to maximize the transfer capability across the West of Hatwai cut plane. Local problems on the sub-grid in Western Montana and in the Spokane and Lewiston areas have an adverse effect on the main grid system when hydro generation in Western Montana is at high levels and/or when loads are peaking in the Spokane and Lewiston areas. Infrastructure projects G15, G18, and G20 will help to mitigate these problems.

- **G15 – Libby – Sand Creek 230 kV**

- **G18 – Hatwai - Lolo 230 kV**
- **G20 – Sand Creek - Bell 230 kV line and 230/115 kV transformer**

The following are non-federal transmission projects under consideration that may serve to meet the Phase 2 requirements as alternatives to the above:

- **A1 Noxon-Shawnee Reinforcement**
 - **Complete the second Noxon-Pine Creek 230 kV line**
 - **Re-conductor/Re-build the Benewah-Moscow 230 kV line**
 - **Construct the Benewah-Shawnee 230 kV line**
- **A2 Lewiston Area Reinforcement**
 - **Construct the Dry Creek 230 kV switching station**
 - **Reconfigure the Hatwai 230 kV substation**
- **A3 Spokane Area Reinforcement**
 - **Construct the Lancaster-Rathdrum 230 kV line**
 - **Construct the Beacon-Rathdrum 230 kV double circuit line**

Some combination of the phase 2 projects may be required to mitigate the WOH cut-plane congestion and joint studies are being conducted between Avista Corp. and BPA to determine the best plan. A key element during the construction of the necessary projects to relieve the congestion across the WOH cut-plane is the development of a coordinated project schedule. In order to minimize environmental impacts, speed up project completion, and reduce costs, a majority of these projects will be built along existing transmission right of ways. This will require key transmission facilities being removed from service for prolonged periods of time to facilitate construction. These construction outages will result in curtailments to the WOH cut-plane. A thorough analysis will be required to determine the best order to construct the proposed projects. Also, additional projects may need to be constructed to maintain transfer capabilities during the construction of other facilities.

Alternatives Considered

Two alternatives to the Bell-Coulee 500 kV line project were considered. These alternatives are:

1. Bell-Ashe 500 kV line.
 - This line is estimated to be 145 miles requiring new right-of-way. The other portions of the project would be the same as for the Bell-Coulee 500 kV line. Estimated cost for this project is \$210-215 M.
 - Although the Bell-Ashe 500 kV line performs slightly better technically than the Bell-Coulee 500 kV line, it costs about \$95 M more.
 - The Bell-Ashe 500 kV line alternative could potentially require less RAS than a Bell-Coulee 500 kV line to meet reliability criteria since it is not located on parallel ROW with the existing Bell-Coulee 230 kV double circuit line.

- One risk associated with the Bell-Ashe 500 kV line alternative is the requirement for 145 miles of new ROW. This increases the cost significantly and would delay completion by at least 2 years compared to the Bell-Coulee 500 kV line. Another risk associated with this alternative is that a Bell-Ashe 500 kV line would have to cross the Hanford National Monument. This would make siting very difficult and could delay project completion even further.

2. Taft-Lower Granite 500 kV line.

- This line is estimated to be 150 miles requiring new right-of-way. The other portions of the project would be the same as for the Bell-Coulee 500 kV line.
- Estimated cost for this project is \$220-225 M, approximately \$105 M more than the Bell-Coulee alternative.
- In addition, this project would also require building a third 500 kV line from Lower Granite to the planned Starbuck substation, approximately 20 miles, to realize it's full potential. This would also tend to push more loading on the West-of-McNary path, which is already constrained.
- The Taft-Lower Granite alternative may not perform as well as the alternatives from Bell substation to integrate new generation. New generation is being proposed in the North Idaho and Spokane areas and may be better delivered through 500 kV lines west of Bell substation.
- One risk associated with the Taft-Lower Granite 500 kV line alternative is the requirement for 150 miles of new ROW. To meet WSCC reliability requirements this new line could not be constructed adjacent to the existing line and provide a significant increase in allowed transfer capability. This increases the cost significantly and would delay completion by at least 2 years compared to the Bell-Coulee 500 kV line.

Phase 1 Energization Date: Fall 2004
Phase 1 Estimated Cost: \$115-120 M (loaded)

Phase 2 Energization Dates:
 G15 – Fall 2005
 G18 – Spring 2005
 G20 – Fall 2006

Phase 2 Estimated Cost:
 G15 – \$50-55 M
 G18 – \$15-20 M
 G20 – \$55-60 M

Attachment 6

G-10 THRU G-20 JUSTIFICATION

10. Portland Area Additions (Pearl 500/230-kV Transformer)

Justification/Project Description

This project adds a second 500/230-kV transformer at Pearl substation to provide reliable load service to the Portland area. Without this project, an outage of existing Pearl transformer will overload the McLoughlin 500/230-kV bank and/or the McLoughlin-Pearl 230-kV line by 2004.

Limiting Outages Addressed

Pearl 500/230-kV transformer

Energization Date: Fall 2003

11. Puget Sound Area Additions - Phase II (South Seattle 500/230-kV Transformer Support)

Justification/Description

This project consists of adding an additional 500/230-kV transformer in the South Seattle area to provide reliable load service. Without the project, an outage of the 500/230-kV transformers in the South Seattle area will overload the Covington 500/230-kV transformers.

Limiting Outages Addressed

Covington 500/230-kV transformers

Maple Valley 500/230-kV transformer

Tacoma 500/230-kV transformer

Energization Date: Fall 2005

12. Olympic Peninsula Additions (Shelton 500/230-kV transformer and 500-kV line addition)

Justification/Description

This project relocates the Satsop 500/230-kV transformer to Shelton substation and constructs a new 20 mile, Olympia-Shelton 500-kV line. This project is needed to solve voltage stability problems on the Olympic Peninsula as well as mitigates breaker failures and other N-2 contingencies in the Olympia/Shelton area.

Limiting Outages Addressed

Olympia 500/230-kV transformer
Olympia 230-kV breaker failures
Olympia-Shelton 230-kV double line loss

Energization Date: Fall 2005

13. I-5 Generation Additions (Paul-Troutdale 500-kV line)

Justification/Description

This project constructs a new, 105 mile Paul-Longview-Troutdale 500-kV line. It also includes a new 500/230-kV substation (3 breaker ring bus) in the Longview area. These additions are needed to reliably integrate several new generator additions along the I-5 corridor. This addition will increase the transfer capability on the I-5 corridor (South of Paul) by approximately 1100 MW.

Limiting Outages Addressed

Allston-Keeler 500-kV line
Keeler-Pearl 500-kV line
Trojan-Allston 230-kV double line loss
Paul-Allston 500-kV double line loss

Energization Date: Spring 2006

14. North of John Day/Portland Area Reinforcement – Phase I (Loop the Hanford-Ostrander 500-kV line into Big Eddy)

Justification/Description

This project consists of constructing a new 20 mile, 500-kV line to loop the existing Hanford-Ostrander 500-kV line into Big Eddy substation. This project provides some reinforcement to the North of John Day constrained path as well as provides increased reliability of load service to the Portland Area during cold weather.

Limiting Outages Addressed

Big Eddy-Ostrander 500-kV line (winter)
Pearl 500-kV breaker failures (winter)
John Day-Big Eddy 500-kV double line loss (summer)
Ashe-Marion/Slatt-Buckley 500-kV double line loss (summer)
Slatt 500-kV breaker failures (summer)

Energization Date: Spring 2006

15. West of Noxon Reinforcement - Phase I (Libby-Bonnors Ferry line rebuild)**Justification/Description**

This project rebuilds the line between Libby and Bonnors Ferry substations (60 miles of new 230-kV double circuit construction). The new line would be initially operated at 115-kV. This project is needed to relieve overload constraints during high Montana-PNW transfers. In addition, the project is being built double circuit to provide for future load service to North Idaho and provides the flexibility to extend the 230-kV line to Bell substation. (Also see project 20).

Limiting Outages Addressed

Taft-Dworshak 500-kV line
Taft-Bell 500-kV line
Libby-Noxon 230-kV line

Energization Date: Fall 2005

Phase III - Infrastructure Additions:**16. Lower Monumental and McNary Area Generator Additions (McNary tap to Ashe-Marion 500-kV line)****Justification/Description**

This project constructs a 30 mile, 500-kV line from McNary to a tap on the Ashe-Marion 500-kV line and terminal additions at Slatt and McNary substations. This project is needed to reliably integrate several generator additions in the McNary and/or Lower Monumental areas.

Limiting Outages Addressed

McNary-John Day 500-kV line
Coyote-Slatt 500-kV line

Energization Date: Spring 2006

17. West of Spokane and Lewiston Reinforcements – Phase II (Little Goose-Starbucks 500-kV Line)

Justification/Description

This project constructs a new 15 mile, Little Goose-Starbucks 500-kV line and terminal facilities. Without this project a double line loss on the Little Goose-Lower Monumental corridor will limit the capability of the system to integrate or move energy West of Spokane and Lewiston.

Limiting Outages Addressed

Little Goose-Starbucks 500-kV double line loss
Coulee-Bell 500-kV line

Energization Date: Fall 2006

18. Pacific Northwest-Idaho – Phase I (Hatwai-Lolo 230-kV line)

Justification/Description

This project constructs a second Hatwai-Lolo 230-kV line and terminal facilities. It also includes a reconductoring the McNary-Round-up 230-kV line (40 miles). This project is needed to increase the Pacific Northwest's transmission system's ability to import power from Montana and export power to Idaho simultaneously.

Limiting Outages Addressed

Midpoint-Summer Lake 500-kV line/Midpoint-Boise Bench 230-kV double line loss
Brownlee-Hells Canyon 230-kV line loss
Hatwai-Lolo 230-kV line
Hatwai-N Lewiston 230-kV line

Energization Date: Spring 2005

19. Pacific Northwest-Idaho – Phase II (McNary-Brownlee 230-kV line)

Justification/Description

This project constructs a second 160-mile, McNary-Brownlee 230-kV line and terminal facilities (including series capacitors). This project is needed to increase the Pacific Northwest-Idaho constrained path transfer capability by 150-200 MW.

Limiting Outages Addressed

Midpoint-Summer Lake 500-kV line/Midpoint-Boise Bench 230-kV double line loss

Lolo-Oxbow/Brownlee-Hells Canyon 230-kV double line loss

Energization Date: Spring 2006

20. West of Noxon Reinforcement - Phase II (Libby-Bell 230-kV line)

Justification/Description

This project constructs a new 230-kV line between the Sandpoint area and Bell substation (75 miles of new construction) to create a new Libby-Bell 230-kV line including terminal facilities. In addition, a new 230/115-kV transformer would be added at Sand Creek Substation. One side of the Libby-Bonniers Ferry double circuit line (Project 15 above) would now be operated at 230-kV. This project is needed to reinforce the North Idaho load center, solve overload constraints during high Montana-PNW transfers and reduce the need for generator dropping at Libby.

Limiting Outages Addressed

Albeni Falls-Priest River 115-kV line section
Libby 230/115-kV transformer/Cabinet Gorge-Sand Creek 115-kV line
Libby-Noxon 230-kV line
Taft-Bell 500-kV line
Taft-Dworshak 500-kV line

Energization Date: Fall 2006

Attachment 7

Benefits of Bonneville Infrastructure Additions

TRANSMISSION INFRASTRUCTURE PHASE 1 ADDITIONS

1. Puget Sound Area Additions. (Kangley-Echo Lake 9 Mile 500-kV line, Snoking 500/230-kV bank, etc.) - Reliability reinforcements for Seattle area load center, increases transfer capability to and from Canada.
2. North of Hanford/North of John Day Project (Schultz – Black Rock 59 Mile 500-kV line and Black Rock substation) - Relieves congestion and improves reliability in mid-Washington, Oregon and increases transfer capability to and from California.
3. West of McNary Project (McNary-John Day 70 Mile 500-kV line) Integrates up to 2800 MW of new generators in the bend of the Columbia River.
4. Starbuck Generation (Lower Monumental – Starbuck 15 Mile 500-kV line & Starbuck 500-kV Substation) - Integrates 1200 MW of new generation at Starbuck.
5. Lower Monumental and McNary Area Generation (Wallula-McNary 30 Mile 500-kV line and Wallula substation) - Integrates 1300 MW of new generation at Wallula Junction.
6. Cross Cascades North (Schultz Series Capacitors) - Relieves Cross-Cascades North congestion and prevents voltage instability in the Puget Sound area during winter peak loads .
7. Celilo Modernization – Valve and Controls Replacement - Keeps the DC transfer capability between PNW and southern California at 3100MW indefinitely (would otherwise be reduced to 1100MW).
8. I-5 Corridor Generation Additions (Monroe – Echo Lake #2 32 Mile 500-kV Line) - Reinforces Seattle area load center, enables return of the Canadian Entitlement, relieves Northern Interconnection congestion, and integrates new generation.
9. Grand Coulee – Bell 85 Mile 500-kV line - Restores at least 600 MW lost transfer capability needed to meet current firm commitments, reduces schedule curtailments that is keeping generation from getting to market.

FEDERAL HYDRO INFRASTRUCTURE

- Ongoing or planned upgrades to turbine runners are underway for the original powerhouses of Grand Coulee, the first portion of the Chief Joseph powerhouse, and McNary powerhouse. At McNary, a complete powerhouse rehabilitation is planned that includes new runners, rewinding of generators and a series of reliability improvements to other equipment. Total energy gained over 10 years is 20 aMW above what is in President's budget.
- Hydro optimization involves a variety of activities for example, operating the most efficient units within a plant and operating the most efficient plants within the system can provide 1 to 4% gains in total system generation. Foregoing the incremental investment would result in over 60 aMW of lost energy.
- In the next five years, 5 investments to capture unused water are under consideration, namely, rebuilding Boise Diversion project, adding turbine generators on fish attraction water at John Day and Bonneville projects, and adding one new unit each at Dworshak and Detroit projects. Current estimates of energy gained for these investments are 60 aMW.

- Close to 75 specific projects in the reliability category are currently underway. Examples include rewinding generators, replacing governor control systems, main unit breakers and step-up transformers, and restoring operation of failed or failing components. Foregoing these investments increase the risk that generation availability will decline over time. The energy benefit associated with this activity has ignored this very costly decline in availability, but rather has focused on the increase in availability that would result if investments were made before equipment failure occurs. The energy gained from the incremental investment for increasing availability during the 10-year period is about 20 aMW

CONSERVATION INVESTMENTS

- 100 aMW at a cost of \$29 MW through a variety of programs such as commercial lighting retrofits, compact fluorescent lightbulbs etc.

Attachment 8

Bonneville

Power Administration



A Proposal for the Northwest's Long-Term Power Solution Investments in Infrastructure

Bonneville Power Administration

July 2001

- Bonneville's mission and mandates
- Bonneville's proposal to help West Coast energy crisis
- Why Federal ownership
- Impact of Federal financing
- Bonneville's ability to repay the U.S. Treasury
- Capital decision-making filters
- Public involvement process
- Financial decision-making filters
- Evaluation process
- Infrastructure project
 - Power
 - Transmission
- Summary and conclusion

Bonneville's Unique Mission

- Bonneville is the steward of vital regional assets
 - Including investment in Federal regional infrastructure equal to almost \$9 billion; and
 - investment in non-Federal infrastructure of about \$6 billion
- Bonneville provides public benefits through its successful commercial operations
- Bonneville has a long-term view and invests in projects that provide lasting benefits to future generations



Bonneville's Statutory Missions

- Provide electric power at its total system cost
- Build, operate and maintain a reliable transmission system
- Provide preference in access to Federal power to municipal systems, public utility districts and rural cooperatives
- Provide for the participation and consultation of the public in regional plans and programs
- Protect, mitigate and enhance fish and wildlife affected by Federal hydroelectric development in the Pacific Northwest
- Provide leadership in achieving the region's cost-effective potential for energy conservation and renewable energy resources
- Recover costs necessary to produce, transmit and conserve resources to meet electric requirements
- Provide preference in access to Federal power to the Pacific Northwest
- Serve any load placed on us with sufficient notice by regional utilities



Bonneville's Proposal

- Bonneville's short-term strategy of load reductions would not have been successful without a commitment to a long-term investment strategy which requires an increased limit on borrowing authority to implement
- Bonneville is requesting an increased limit on borrowing authority so that it can initiate long-term capital programs designed to remedy regional and West Coast power system constraints
- Borrowing authority provides the capital certainty necessary to begin long-lead time transmission and power programs; specific projects within those programs will still go through an annual public, Administration, and Congressional review
- An increased limit on borrowing authority will allow Bonneville to develop transmission and conservation investments to a point sufficient to solicit private partnerships or financing



Estimated Components of Additional Borrowing Authority Limit

(\$ Billions)

\$1.3	Transmission Investments
\$0.5	Federal Hydro Investments
<u>\$0.5</u>	Conservation Investments
\$2.3	Total Investments over 10 years (FY's 2002 to 2011)
<u>(\$0.3)</u>	Repayment of Bonds
\$2.0	Requested Increase in Borrowing Authority Limit
	Sufficient to last 10 years

- Investment and bond repayment amounts are estimates.
- Approved investments will be evaluated through Bonneville's capital budgeting process, then receive review by customers, constituents, the Administration and Congress
- Specific transmission improvements and program scope will be informed by the Department of Energy's Transmission Study findings

National Energy Policy

- Bonneville's proposal is consistent with the National Energy Policy as submitted to the President on May 16, 2001 in the following areas:

- Transmission in Chapter 7: *America's Energy Infrastructure - A Comprehensive Delivery System*
- Power in Chapter 5: *Energy for New Century - Increasing Domestic Energy Supplies*
- Conservation and Energy Efficiency in Chapter 4: *Using Energy Wisely - Increasing Energy Conservation and Efficiency* and Chapter 6: *Nature's Power - Increasing America's Use of Renewable and Alternative Energy*



Why Federal Investment?

- Bonneville investments are necessary to achieve the agency's unique mission and statutory mandates.
- Hydro investments
 - Business-like management of Federal assets calls for new investment in the existing system which will maintain or enhance revenue-producing generation
 - Investments in Federal Hydro do not lend themselves to private partnership due to questions of ownership and risks associated with the operation of the facilities (e.g., fish operations and water supply), the need to satisfy multiple uses, and Bonneville's need for generation to meet its own load obligations

Transmission Investments

- Investments for additions and upgrades become part of the integrated Federal transmission network such it is difficult, if not impossible, to separate the costs and revenues associated specific investments
- Transmission investments should be federally owned where they either
 - 1) restore solid capacity lost across market paths due to changed conditions, or
 - 2) are for system-wide reliability



Why Federal Investment (cont.)

- Conservation investments
 - Bonneville is required by law to acquire all cost-effective conservation first when developing new power resources to meet future loads
 - Conservation purchases offset power purchases and/or generation additions. Bonneville would have to make in order to meet its load obligations, absent the conservation savings achieved

Benefits of Federal Financing

- Federal financing is on par with AAAA rated taxable debt. It can be issued in small amounts with low issuance costs and on relatively short notice.
- Other financing mechanisms may be encumbered with unnecessary and burdensome restrictions by the third party issuer and/or lender. The involvement of a third party makes decisions on debt issuances and ongoing debt management much more complicated, expensive and uncertain, particularly considering the magnitude of the financing needed.
- Federal financing supports, protects, maintains, and enhances the Federal investments that have already been made in the region.



Opportunities to Use Third-Party Financing

- Bonneville will offer all new transmission investments for private partnerships
 - Partnerships are likely where investment increases the rated transfer capability of marketed paths
- Federal hydro investments do not lend themselves to private partnership for the reasons identified earlier
- Bonneville has used private financing for conservation before and will seek such again from among program participants and other third parties



Third-Party Financing: Cost and Timing

- The cost of borrowing through any source other than Treasury is substantially higher. It could range from an additional cost of 1.0-2.0% for some types of financing and up to an additional 5.0-7.0% for the most expensive forms of third party financing.
- Since third party financing has shorter terms and higher interest rates, upward rate pressure would result as capital investments are recovered more quickly through rates.
- Limited amounts of third party financing may be available on relatively short notice, although these tend to be the highest cost alternatives. Larger amounts (over \$50 million) would require about a year to access, implying significant delays in infrastructure projects. Additional third party debt will be senior to Treasury debt, which tends to increase the risk associated with ongoing payments to Treasury.
- Finally, due to an uncertain regulatory environment, significant third party transmission financing by Bonneville possibly could result in complications for RTO formation or additional FERC filing requirements.



Mechanisms to Assure Bonneville's Ability to Repay Any Increase in Outstanding Bonds

■ Agency

- Bonneville set its rates to maintain an 80-88% probability of paying Treasury on time and in full over the five-year rate period. This is approximately equivalent to a 95.6%-97.55 % probability for each year of the rate period

■ Transmission

- Flexibility to adjust rates in two years
- Transmission contracts have already been signed that will recover 20% of the 5-year incremental annual costs of \$80 million for the infrastructure investments
- The remaining amount of 5-year incremental costs will be recovered by contracts with less than 1/6 of the proposed new generation and other sales
- Low risk investment enables substantial generation investment by the private sector



Mechanisms to Assure Bonneville's Ability to Repay Any Increase in Outstanding Bonds

■ Power

- 5 year take or pay contracts signed as a result of subscription process
- Ability to periodically adjust power rates during the 5 year rate period
 - Load-Based Cost Recovery Adjustment Clause - designed to cover the net cost of augmenting Bonneville's system. Amount will be adjusted for each six-month period beginning October 1, 2001
 - Financial-Based Cost-Recovery Adjustment Clause - triggers when a forecast of Accumulated Net Revenues falls below a set threshold value for a particular year
 - Safety Net Cost Recovery Adjustment Clause - designed to raise rates if a payment to Treasury or other creditor has been missed or there is a 50% probability that such payment will be missed in the current year

→ To mitigate Bonneville's exposure to potentially high-priced spot market, the agency has undertaken a load buy-down program



Scoring Issues

- The Congressional scoring rules will expire at the end of FY 2002 and the new rules for the following fiscal years have not been developed.
- As the bill is currently written, Bonneville's increased limit on borrowing authority will have a zero or slightly beneficial score in FY 2002, the current budget year.
- Based on discussions with the Congressional Budget Office and other experts, it is the belief that under existing rules if the bill is passed this year there will be no scoring impact beyond the budget year and once new rules are adopted, it seems unlikely that retroactive scoring will be applied.
- If Bonneville's limit on borrowing authority is not increased this year, there is a significant chance that the bill may have adverse scoring implications for both the budget year and subsequent years making its passage more difficult.



Capital Decision-Making Filters

- The investment plans supporting the request for a higher borrowing authority limit represent anticipated overall investment needs. Although the amount is based on operationally determined projects, some of these projects may change depending on market conditions, and review by the public, the Administration and Congress.
- Specific investments undergo a rigorous internal investment review process and public review including environmental studies and Congressional review before they are approved for implementation.



Balanced Scorecard

- The Transmission and Power Business Lines have developed balanced scorecards to ensure successful achievement of their individual strategies and goals. These balanced scorecards have the following traits:

- Customer and Stakeholder perspective

- Reliability, competitive rates, responsive customer service, minimize impact of Bonneville on environment, comply with applicable law and regulations, meet WSCC, NERC, FERC requirements.

- Financial perspective

- Maximize benefit, make Treasury payment, assure continued access to capital and adequate cash reserves, improve asset utilization

- Internal Business Processes

- Safety, internal systems that support key business processes, physical infrastructure
- Learning and growth

- High performing organization, succession planning, strategic skill coverage, information system capabilities, motivation and empowerment



Transmission Business Line Review Process

■ The Transmission Business Line Capital (TBL) Investment Review Panel is the Matrix Team consisting of representatives from various TBL organizations, as well as environmental experts from Corporate.

■ The capital review process:

- The process may require capital investment strategies, ranking criteria (reliability, safety, environment, regulatory), technical and business justifications, economic analyses (Net Present Value, sensitivities analysis), alternatives considered and performance measures (financial and non-financial, connection to agency and TBL targets).
- Technical teams work to develop a portfolio of prioritized projects. Program coordinators in the Scheduling and Estimating group evaluate proposals against approved criteria/strategies, review justifications and cost estimates, identify capital needs by year, and prepare the package for submittal to the Matrix Team.
- Transmission Finance staff performs economic analysis, alternative analysis and develop performance measures in collaboration with project proposers and other appropriate staff.
- The Matrix Team reviews all project proposals resulting in a priority ranked list based project proposals
- A "portfolio" of new projects is developed based on this ranked project list; together with available budget information and prior year project capital needs. The portfolio also makes allowance for unforeseen capital needs and emergencies that may occur during the operating year. This portfolio is submitted to TBL executive management for review and approval.

The portfolio of capital projects and capital needs are presented to the Management Committee and Executive Capital Allocation Board for review and approval



Power Business Line Review Process

- The capital investment review for the Power Business Line is a "bottoms-up" process involving both quantitative and qualitative analysis of proposed multi-year capital spending, and executive review and approval. The process has several steps covering several months each year.
- The steps are summarized below:
 - Each project or project area requiring capital submits a detailed proposal addressing project purpose, alternatives considered, performance measurement, and results from financial and non-financial analysis. Internal analysis frequently is validated through statistical benchmarking to other hydro systems and review by independent contractors retained to assess investment needs.
 - The financial analysis covers annual project costs/benefits, present values and rates of return.
 - The non-financial analysis evaluates the degree to which each project supports the Agency's Strategic Business Objectives, and the Business Line's Balanced Scorecard Strategic Objectives, as well as other qualitative areas such as public benefits, system streamlining improvements, and facilitation of deregulation.
 - The Power Business Line's project-specific, multi-year capital investment proposals then go the business line's Capital Review Panel for review and approval. Following that step, the projects are consolidated into a business line capital investment portfolio for final review and approval by Corporate executive management.



Corporate Review Process

- In Corporate, capital projects fall into four categories—Information Technology, the Business Solutions Project (Bonneville's ERP), Capital Bond Premium, and Other.

- The capital review process:

- Capital project work packages required documentation: 1.) project description and overview, 2.) estimated project cost and associated timeline, 3.) quantifiable benefits, 4.) project net present value, 5.) non-quantifiable benefits, 6.) ranking of the project against agency Strategic Business Objectives (SBOs), and 7.) implications of delaying the project.

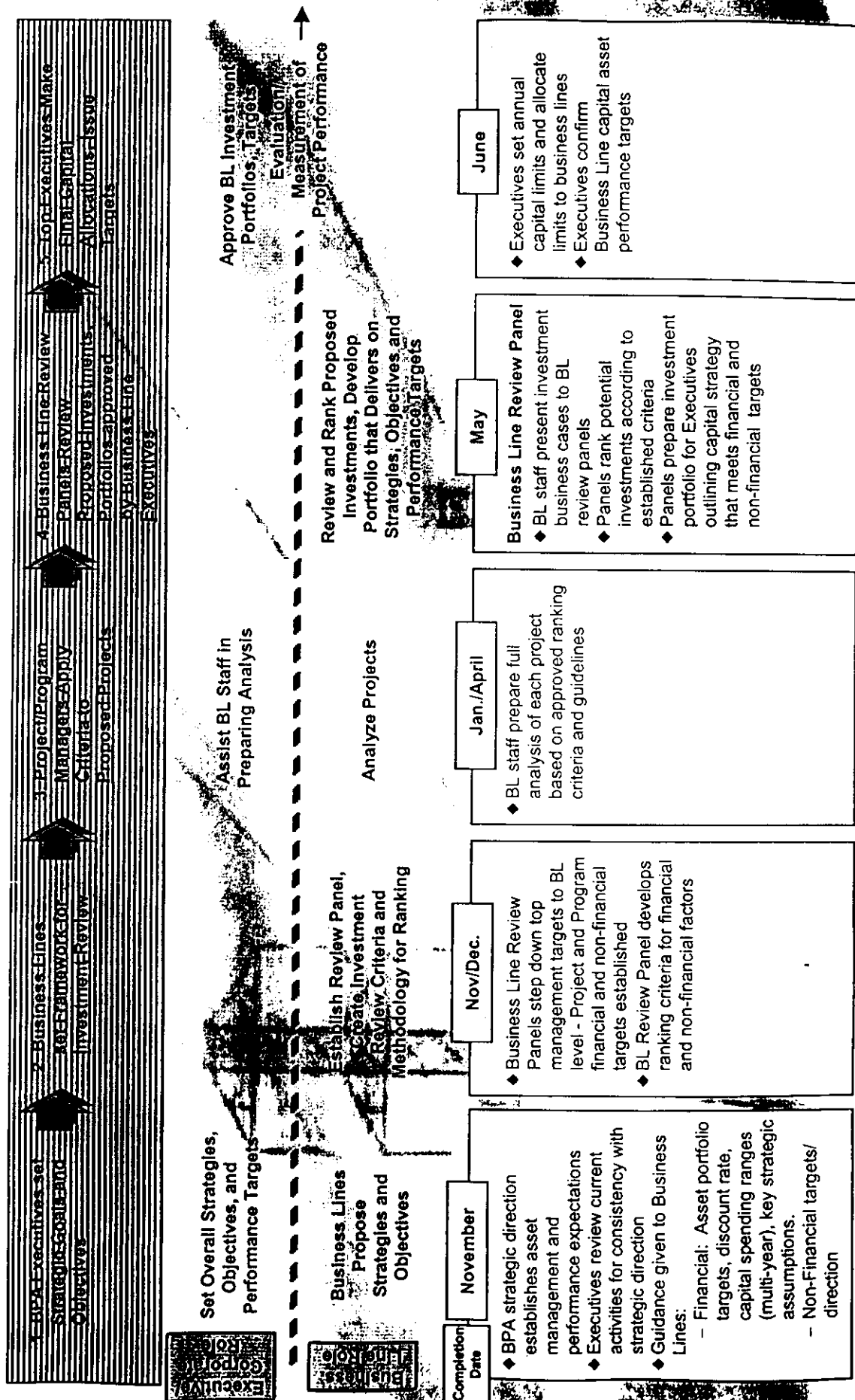
- In a working session, project leads provide more information on their project, the project merits, and associated risks. Team members ask questions and update assumptions or analysis documented in the work packages.

- On a parallel path, the agency EIT Team associated with the CIO's Office reviews all information technology projects and measures them against estimated costs, benefits, fit with Bonneville's technology strategies, and mission value. The EIT Team approves, disapproves, or passes projects back for more analysis.

- Based on the analysis, the team then develops a Corporate Capital Portfolio. The Corporate Capital Management Team reviews the recommended projects and provides further direction. The team then works with management to produce a final package.



Capital Investment Internal Review Process





Public Involvement Process

- Before each rate case begins Bonneville holds numerous public meetings

- For PBL's last rate case, this was accomplished in the 1997 Cost Review and Issues '98

Goals of Cost Review included a review of FCRPS costs by Northwest Power Planning

Council to:

- give confidence to customers, and other constituents the future FCRPS costs will be managed effectively;
- minimize stranded costs;
- ensure that obligations to the US Treasury, third-party bondholders and fish and wildlife recovery would remain at least as secure as they are currently

Issues '98 was designed to provide the region an overview and context for major policy issues surrounding Bonneville's future

For PBL's last rate case, additional workshops were held asking for customer input under the title, "Reliability and the Future of Transmission Costs"

- This process specifically solicited public comment on Bonneville's proposed spending levels for transmission system operations
- The forum also included a discussion with customers and constituents of capital spending levels and planned transmission system improvements, upgrade and reinforcement projects

Bonneville's budget is subject to Administration review and Congressional hearings



Additional Third-Party Validation

- TBL will form an independent technical review committee consisting of representatives of Bonneville's transmission customers and Bonneville.
- The initial annual review will occur during August 2001 for the purpose of reviewing proposed Bonneville transmission investments over \$10 million from FY 2002-2006
- The committee will work to assure that the proposed transmission investment program prioritizes Bonneville's transmission improvement projects in a manner that will provide the most cost effective, reliable service for the region's consumers.
- The committee will report annually to the Northwest Power Planning Council. The goal will be a report that enjoys the unanimous support of the committee. Bonneville is not legally obligated to abide by any recommendations made by the committee.
- The committee's scope of work is limited to transmission issues, and does not include transmission facility siting.



Financing Decision Making Filters

Transmission:

- Transmission account executives notify planning staff of any partial or complete project financing opportunities by customers.
- The matrix team determines the feasibility of the financing arrangement e.g. cost, schedule, ownership, operation and maintenance agreements, risk assessment, etc.

Power:

- Bonneville seeks third-party financing for its conservation investments from sources among program participants and other third parties



Evaluation Process (Performance Measures)

- For the Transmission infrastructure projects, the projects are evaluated against four criteria:

- Change in total capacity added to increase transfer capability as a result of the project
- Total MW of generation integrated into the transmission system
- Total additional MWs of load served
- Cost/benefit analysis is completed.

Other transmission projects are evaluated similarly with operational, financial, and strategic measures.

- For the Power infrastructure projects, the projects will be evaluated against these criteria:

- The benefits produced, including average megawatts gained and installed capacity, with related financial returns
- Statutory requirements and commitments to customers, constituents, and other Federal Agencies

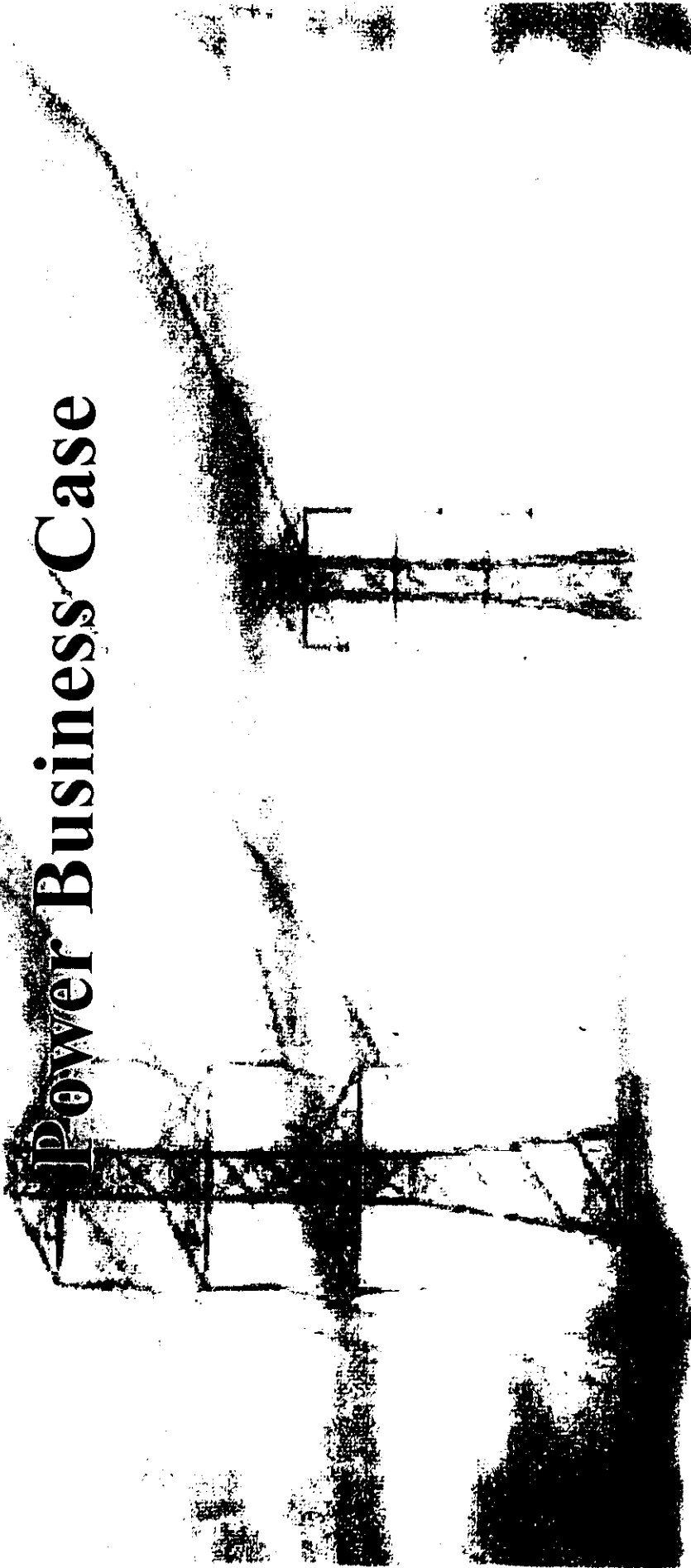
All investments made by Bonneville must over time be recovered from ratepayers and must therefore support Bonneville as a going concern in a competitive wholesale market

Bonneville



Power Administration

Power Business Case





Power: Current System Conditions

- Bonneville, in coordination with the Corps of Engineers and the Bureau of Reclamation, has management responsibility for 31 hydroelectric facilities located throughout the Pacific Northwest.
- Due to an average age in excess of 45 years and limited investment funding prior to the mid-1990s, generation availability declined to 82 percent compared to an industry benchmark of 90 percent.
- In 1992, the National Energy Policy Act authorized direct funding by Bonneville of Corps of Engineers and Bureau of Reclamation operations & maintenance, and capital investments instead of through annual appropriations. Bonneville ratepayers, not U.S. taxpayers, pay for this direct funding.
- Through direct funding, and the close cooperation of the Corps and Reclamation, Bonneville uses its borrowing authority to make investments needed to restore generation availability and improve efficiency, eliminating demand on appropriations for power-related investments. Since the beginning of direct funding, Bonneville has significantly improved system performance - generation availability is up to 89 percent as of last year. This approach has been developed into the 1999 Asset Management Strategy of the Federal Columbia River Power System (FCRPS).



Need for Additional Investment

- Supplementary analysis, and experience with the system, has revealed additional investment needs above and beyond the levels originally planned under the Asset Management Strategy for the next two five-year periods.
- The first period additions include \$105 million for expansion of generation capacity at existing Federal hydro projects, \$15 million for increases in efficiency investments and \$15 million for hydro-generation improvements to increase project reliability and availability.
- With these improvements, generation availability will increase from 89 percent to 95 percent over the next 10-15 years.
- This, combined with new generation and additional efficiency improvements, should produce about 200 aMW of additional energy during the next rate period (FYs 2002-06), with another 200 aMW or more in the subsequent 5-year period.
- These investments return more than their cost, and exceed the 13 percent internal rate of return (IRR) used by Bonneville in evaluating hydro-generation investments. In fact, the additional infrastructure investments alone have a rate of return (ROR) of 23 percent. They are a critical part of Bonneville's efforts to relieve the energy crisis through increased power generation and improved reliability.



Federal Hydro Projects 10-Year Capital Budget Needs

\$ millions

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>
Asset Management Strategy (AMS) (funds for reliability and generation efficiency investments; budget for FY 2002-06 matches current rate case)	73.6	89.9	86.8	61.7	62.1	62.2
Generation Expansion (additional development at existing Federal projects)	0.0	14.1	27.0	15.9	20.0	28.0
Past Years Carry Forward (funds for AMS needs reprioritized for later implementation)	0.0	0.0	0.0	16.0	30.4	33.6
Hydro Optimization Increment (funds to acquire additional energy that has a particularly fast and high economic return)	0.0	1.0	2.0	4.0	4.0	4.0
Reliability Investment Increment (additional funds needed to maintain a consistent investment in reliability and to cover cost increases)	0.0	0.0	1.2	19.4	13.9	13.4
TOTAL	\$73.6	\$105.0	\$117.0	\$117.0	\$130.4	\$141.2



Major Categories of Investment Activities

SUMMARY (\$ millions)									
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	Total FY 2002-06	Total FY 2007-11	
Small Capital	10.4	10.5	10.7	10.9	11.2	11.5	54.8	62.1	
Generation Efficiency	3.3	17.4	18.2	25.0	34.6	37.4	132.5	96.1	
Hydro Optimization	4.4	5.0	6.0	8.0	9.0	10.0	38.0	28.0	
Reliability Investments	55.4	58.0	55.1	57.2	55.6	54.3	280.2	288.8	
Generation Expansion	0.0	14.1	27.0	15.9	20.0	28.0	105.0	186.0	
TOTAL	\$73.6	\$105.0	\$117.0	\$117.0	\$130.4	\$141.2	\$610.6	\$661.0	

The projected investments result in benefits, specifically in incremental energy gains in average megawatts, as shown below. This energy gain was used to evaluate the rate of return that is a critical part of the justification for the investment program.

INCREMENTAL ENERGY ACQUIRED	FY-2001	FY-2002	FY-2003	FY-2004	FY-2005	FY-2006	Total FY 2002-06	Total FY 2007-11
Small Capital	*	*	*	*	*	*	*	*
Generation Efficiency	0.0	10.0	10.0	15.4	22.6	22.2	80.2 aMW	76.9 aMW
Hydro Optimization	8.0	6.0	9.1	18.1	21.2	21.2	75.6 aMW	84.7 aMW
Reliability Investments	9.0	28.7	27.3	27.3	32.2	33.0	148.5 aMW	198.4 aMW
Generation Expansion	8.0	0.5	6.1	3.8	4.3	11.1	25.8 aMW	33.0 aMW
TOTAL	25.0	45.2	52.5	64.7	80.3	87.5	330.2 aMW	392.9 aMW

Energy acquired is included in other areas shown below



Size of FCRPS Hydro System

- The hydroelectric assets of the FCRPS constitute 80% of the generation sold by Bonneville. This represents roughly half of the electricity generated in the entire Pacific Northwest. The investments identified above will serve to increase the efficiency of the system, and extend its life so the Pacific Northwest and West Coast will continue to receive low cost power for years to come.
- While the investment levels are significant, it is important to consider the entire FCRPS to which they will be applied. The FCRPS is one of the largest hydroelectric generation systems in the world at over 22,000 MW of installed capacity producing on average 8,900 aMW. When compared to other hydroelectric utilities' investments, the FCRPS investment is at the low-end range of capital investments (see table below). The investment rates per installed generation capacity (\$/MW) by year are shown in the following table alongside other utilities' overall rates.



The FCRPS program is at the low end of the range of capital investments compared to other hydro utility programs. See table below.

The FCRPS is one of the largest hydro systems in the world at over 22,000 MWs of capacity producing an average of 78 million megawatt hours

INVESTMENT PER INSTALLED CAPACITY (\$/kW)										Total FY 2002-06	Total FY 2007-11
.	FCRPS (22,513 MW)			3.27	4.04	4.00	4.49	4.90	5.03	\$ 4.49 /kW	\$ 4.22 /kW

Representative Hydro Utilities Benchmark

BC Hydro	75000 MW
Ontario Power Generation	9746 MW
Vattenfall (Sweden)	7200 MW
Duke Power	7514 MW
TVA	1634 MW
Seattle City Light	2740 MW
	1051 MW

> \$ 7.00 /kW
\$ 6.16 /kW
\$ 16.67 /kW
\$ 4.66 /kW
\$ 16.52 /kW
\$ 14.20 /kW
\$ 7.42 /kW



Conclusion - Investment in FCRPS

- The Federal Columbia River Power System is the environmentally cleanest and most renewable power supply on the West Coast.
- The economic investments go beyond paying for themselves, both in direct internal rates of return and indirectly through economic stimulus in the region.
- The added generation capability and availability mitigates the Pacific Northwest and West Coast energy crisis both now and in the future while at the same time tempering price volatility on the wholesale market through low cost-based rates.



Why Bonneville Funds Conservation

■ Bonneville's Statutory Conservation Mandate: The PNW Electric Power Planning and Conservation Act (Public Law 96-501) requires Bonneville first to acquire all cost effective conservation when developing power resources to meet future loads as the Administrator determines are consistent with the NW Power Planning Council's Power Plan (6.(a)(1)).

The NW Power Planning Council's next Power Plan specifies that Bonneville's share of the regional, cost-effective conservation target will be about 220 aMW by 2006. In addition, the Council's Plan further estimates that Bonneville's target will be another 250 aMW of conservation in the 2007 to 2011 period. Bonneville has committed to meet or exceed the Council's targets. Bonneville anticipates that between 100 and 225 aMW of this amount will be acquired under the Augmentation Strategy using Bonneville's Treasury borrowing authority.

Bonneville buys conservation at the lowest possible cost to augment its resource portfolio. Conservation purchases are designed to offset power purchases that Bonneville would have to make absent the conservation savings achieved.



Proposed New Conservation Investment

- Bonneville's proposed new Capital Investment in Conservation is made up of two major parts: (1) Conservation as part of Augmentation; and (2) Energy Web
- Conservation investments as part of Augmentation (ConAug) are designed to offset some of the power purchases that Bonneville would have to make to meet its load commitments during the next Rate Period. ConAug offers several ways for customers to participate in regional energy conservation. The capital budget for ConAug overall is based on an average cost per megawatt acquired, but budgets are not broken down to component programs beyond FY2002. Since Bonneville is negotiating program features and customer-specific deals, individual contracts and types of measures are not known far in advance. Bonneville is setting cost targets that will change as prices on the market changes.
- ConAug program components include (1) Request for Interest in Reducing Load Through Conservation (IRLC), which will result in customer proposals in the areas of Residential Weatherization, Commercial Lighting and HVAC, Industrial Processes and Lighting, and Irrigated Agriculture; (2) Residential Compact Fluorescent Lighting; (3) "Vending Miser", a program to reduce energy use in regional refrigerated vending machines; and (4) Federal "Quick Start", a program to help Federal installations in the Region reduce energy use.



New Conservation Investment (cont.)

- In addition to ConAug, Bonneville also is exploring how best to integrate demand side management, distributed generation, and other “cutting edge” technologies into its resource portfolio. This effort, Bonneville’s “Energy Web” initiative, includes a number of projects to facilitate the integration of these advanced technologies into practical utility and consumer applications.

- The following table summarizes Bonneville’s new Conservation Investments:

SUMMARY (\$ millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	Total FY 2002-06	Total FY 2007-11
Con Aug	\$ 24.0	\$ 40.2	\$ 58.0	\$ 73.8	\$ 94.0	\$ 290.0	\$ 200.0
* IRLC	\$ 13.5	\$ 16.2	N/A	N/A	N/A	\$ 29.7	N/A
* Regional CFL	\$ 3.5	N/A	N/A	N/A	N/A	\$ 3.5	N/A
* Vending Miser	\$ 4.7	N/A	N/A	N/A	N/A	\$ 4.7	N/A
* Fed Quick Start	\$ 2.1	N/A	N/A	N/A	N/A	\$ 2.1	N/A
Energy Web	\$ 2.0	\$ 2.0	\$ 2.0	\$ 2.0	\$ 2.0	\$ 10.0	\$ -
TOTAL	\$ 26.0	\$ 42.2	\$ 60.0	\$ 75.8	\$ 96.0	\$ 300.0	\$ 200.0



Bonneville's Role in the Private Public Conservation Partnership

• Bonneville's capital program is a small but key piece of the Northwest Regional Power Plan and the regional conservation program. Bonneville is responsible for less than half of the region's conservation and our capital program represents less than 25% of the total regional conservation investment called for in the plan. Bonneville's capital program is $\frac{1}{2}$ of the Agency total conservation budget (the other half is expensed-paid for directly from current revenues). The Regional Plan calls for additional savings of 1079 aMW from 2001 through 2010. Bonneville's share over the next 10 years is 467 aMW, of which up to 225 aMW will be financed with debt. Bonneville's leadership in this private/public partnership is essential.

• Bonneville energy efficiency programs are implemented by the private business sector. Bonneville provides funding to consumers to pay for conservation that would not be done without some support. Funding flows through Bonneville's customer utilities that pay for work done by local companies that install measures in homes and businesses. The businesses that provide conservation goods and services range from engineering and consulting firms, to "mom and pop" weatherization installers; from window and insulation manufacturers to companies that manufacture and install efficient industrial equipment.

• In addition to the companies that benefit, the conservation resource strategy results in additional jobs compared to construction of thermal generation. A study of Northwest conservation programs done by Charles River Associates, of Boston Massachusetts, found that energy efficiency conservation programs employed approximately 53 people in the Pacific Northwest per million dollars spent, compared to 33 people employed on construction of alternative thermal generation.

Additional Reasons for Bonneville's Investing in Conservation

- A diverse portfolio of resources that includes conservation provides a more reliable approach to meeting Bonneville's load obligations. Long-term investments in energy efficiency provide a "shock absorber" for the FCRPS against future resource uncertainties. During periods of price volatility, conservation also helps reduce financial risk associated with relying on the market for energy purchases in the future, because it keeps on producing at the original cost incurred.
- Investments in conservation stretch the existing resource base further. Also, strategic conservation can help Bonneville manage capacity problems and other constraints on existing transmission facilities.
- Numerous local, regional and national surveys indicate that rate payers support conservation and other non-polluting resources because they want a clean, healthy environment. Based on the NWPP's mix of resources in QY 2000, the pollution savings per aMW would be 4 tons of SO₂, 10.6 tons of NO_x, and 4494.4 tons of CO₂.
- State and local officials in the PNW support Bonneville's augmentation efforts only in the context of a robust conservation initiative. (See 6/4/01 letter from the four NW governors, etc.).
- "Conservation and energy efficiency are important elements of a sound energy policy." National Energy Policy, Chapter 4: *Using Energy Wisely – Increasing Energy Conservation and Efficiency* (May 2001).

Bonneville



Power Administration

Transmission Business Case



Current Situation

- The system is under stress because it is operating at or near capacity
- System constraints are affecting our ability to use & care for the system
 - Available resources force us to run the system harder
 - Outages for Maintenance & Construction are more difficult to obtain and are compressed in time, due to high utilization by the markets
- Likelihood of system failure is increasing
 - The system facilities are aging

Current Situation

■ Approximately 27,000 MW of generation has been proposed in the Pacific Northwest

- The Transmission System will become more stressed with the addition of generation if nothing is done to reinforce the existing network

■ RTO will not begin operation before FY 2004, at the earliest

- The RTO will not begin the process of system planning and directing subsequent system reinforcement for several years following its start up
- Bonneville will be responsible for making the infrastructure reinforcements in the Federal part of the NW grid in any event



System Stress

- Deregulation has created different users and resulted in unusual generation patterns
 - Reliability criteria changes due to market pressures
 - Gaming may occur which could be detrimental to system
- The western interconnection's energy crisis isn't just a generation issue -- it's also the transmission system to move it around
- We've used controls and communications to safely use the margin that was built in, but we've taken this about as far as we can
- California Market conditions are continuing to stress the interties and existing congested paths
- Bonneville transmission investment patterns are typical of the industry at large; this is a national phenomenon



Solutions

- Recognize that transmission investments are needed now and economically make sense
- Estimated use of the new facilities is expected to be high enough to generate sufficient revenue to recover the costs without rate increase
- Encourage Generation to be built near load or uncongested paths as much as possible
- Understand the problem has been building over the last decade and there are no quick fixes
 - It takes 2-5 years to plan, site & build a major transmission line
- Seek cooperation and support of other transmission owners in the Pacific Northwest
 - Private sector has been unwilling to invest in transmission because of the low rate-of-return; when they have been willing to do so we have built joint projects
- This infrastructure plan reflects an additional \$775M over our current 2002-2006 expenditure plan of \$1.3B



Conclusion - Transmission

- Bonneville's infrastructure plan reflects an additional \$775 million over Bonneville's current FYs 2002 to 2006 transmission expenditures of \$1.3 billion.
- In 2001, Bonneville has been gearing up to begin the additional infrastructure build out. This has required focusing on system planning and preliminary engineering activities rather than construction and material acquisition.
- The numbers for FY 2002 through 2006, however, have increased significantly due to the proposed additional infrastructure build out.
- From 2006 to 2011, the capital dollars level off again. Because it is more difficult to plan out in this horizon, these numbers reflect more uncertainty of projects in this time frame rather than less need for transmission projects at this time or fewer projects.



Major Categories of Investment Activities

SUMMARY (\$ millions)	FY 2001						FY 2006		Total FY 2002-2006	Total FY 2007-2011
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2006	FY 2006		
Main Grid	23.5	97	249.6	382.9	257.2	118.3		1,105.0	237.2	
Area and Customer Service	19.3	28.4	5.9	6.4	22.6	49.2		112.5	62.5	
Upgrades and Additions	41.3	36.4	36.4	39.6	42.3	39		193.7	126.3	
System Replacements	41.7	61.2	62.4	60.8	65.6	62.5		312.5	327.6	
Environment	9.1	9	9	9.1	10.5	10.7		48.3	58.2	
Other, Indirects, AFUDC and Corporate Overhead	38.4	41.1	42.1	42.7	43.7	44.7		214.3	317.8	
Total	\$173.3	\$273.1	\$405.4	\$541.5	\$441.9	\$324.4		\$1,986.3		\$1,129.6

Bonneville

Power Administration



Summary and Conclusion



Summary Table

Changes in Bonneville's Use of Borrowing Authority

(Shows increase of \$2 billion in borrowing authority limit)

SUMMARY (\$ millions)									
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	Total FY 2002-2006	Total FY 2007-2011 ^{1/}	
Transmission	173.3	273.1	405.4	541.5	441.9	324.4	1,986.3	1,129.6	
Federal Hydro	73.6	105	117	117	130.4	141.2	610.6	661.0	
Conservation	0	26	42	60	76	96	300.0	200.0	
Other	55	48	49	47	45	45	234.0	234.0	
Amortization	-143	-266	-200	-168	-203	-231	-1,068.0	-1,209.6	
Total	\$158.9	\$186.1	\$413.4	\$597.5	\$490.3	\$375.6	\$2,062.9	\$1,015.0	
Cumulative Bonds Outstanding with Infrastructure									
	\$2,672.1	\$2,858.2	\$3,271.6	\$3,869.1	\$4,359.4	\$4,735.0	\$4,735.0	\$5,750.0	

1/ Amortization for the period FY 2007 through 2011 is estimated, since new repayment have not been completed at this time.



Conclusion - Agency

- Bonneville's investments are necessary to enable public and private sector investments in new generation and private sector investments in distribution and conservation in order to meet the load and reliability needs of the region
- Bonneville's investments will facilitate a West Coast competitive wholesale market that eventually can encompass 15 western states, 2 Canadian provinces and 2 Mexican states
- Investment levels are preliminary pending Bonneville's capital budgeting process, and review by customers, constituents, the Administration and Congress
- These 10-year projections of Bonneville's investments in transmission, hydro-electric facilities and conservation identify a \$2 billion increase in Bonneville's limit on borrowing authority
- Therefore, this amount should be adequate to fund 10 years of Bonneville's capital needs to meet its responsibilities as an on-going transmission owner and generator

Attachment 9

July 2, 2001

To: Bill Palmer
Through: Adrienne Moss, Dave Huey
From: Gale Kabat
Subject: Request for Additional Information on Bonneville Power Administration's Capital and Financing Requirements

Attached is the following information and backup materials that was requested during Bonneville Power Administration's Capital and Financing Requirements briefing on June 7, 2001. Most of this information is available publically and is on the Internet with the exception of items 2, 4, 5, and 9.

1. *Capital and Financing Requirements Supplemental Material* briefing, dated June 14, 2001
2. *Responding to the West Coast Energy Crisis - Infrastructure Investments*
3. *Bringing power to the people: BPA's plan to assure reliable electric transmission in the Northwest*, May 2001 issue of BPA's *Keeping Current*
4. Refinancing Savings The \$179 million of refinancing savings, which are not in the President's base, will help ameliorate the deficit between FY 2001 and FY 2003.
5. Summary BPA Status of Borrowing, which shows the status of outstanding bonds with the Energy Northwest cash savings.
6. Briefing backup: BPA Status of Borrowing (BP-4A through BP-4D)
7. Briefing backup: What Happens If We Don't Get This Borrowing Authority?
8. Briefing backup: three spreadsheets detailing the Transmission Business Line in FY 2001 Budget Request (Base), Incremental Infrastructure Improvements (Incremental), and Transmission Business Line Infrastructure Improvements (Total)
9. Briefing backup: Federal Hydro Projects - Capital per the FY 2002-06 Rate Case and the Increment to the Rate Case (infrastructure increases calculated by Roy Fox)
10. Briefing backup: Conservation Investment

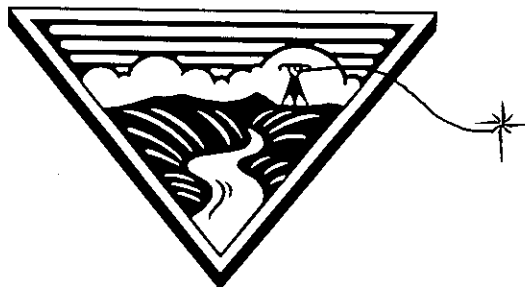
In addition, two studies are included:

1. The June 1999 GAO report to the Chairman, Subcommittee on Water and Power, *Asset Management Strategy for the Federal Columbia River Power System*, and
2. The March 1999 Committee on Resources, House of Representatives on *Federal Power Implications of Reduced Maintenance and Repairs of Federal Hydropower Plants*

ATTACHMENT 10

**BONNEVILLE POWER ADMINISTRATION
FIBER-OPTIC CABLE PLAN**

B O N N E V I L L E
P O W E R A D M I N I S T R A T I O N



◀ March 16, 2000 ▶

Reader's Guide

The following pages present a concise description of the Bonneville Power Administration's Fiber-optics Cable Plan, including all activities relating to installation, operation, marketing, and leasing of fibers/fiber-optic cables and related communication activities. Subjects of particular interest, as requested by Congress, are addressed in the sections noted below:

Activities relating to installation, operation, marketing, and leasing of fibers/fiber-optic cables and related communications operations:

Sections 1.3, 2.4, 3.4

Current and future operational needs:

Sections 1.2, 2.1, 2.2, 3.2

Current leases, planned leasing costs and revenues:

Table 1, Sections 1.4, 3.0, 3.4

Criteria used to determine where and when to install fiber optic cable:

Sections 2.2.2, 2.3

Criteria used to determine leasing agreements:

Sections 3.3, 3.4.2

Summary tables (with cost-per-mile figures, outyear projections, expected revenues):

Tables 1 - 5

Justification of all fiber-optic cable installation activities, including the PMA's specific statutory authority for the activities included in the plan:

Sections 2.5, 3.2, 3.3

Policy and practice regarding the appropriate scope of PMA investments in fiber-optics, including preserving the role of the private sector in building fiber-optic networks.

Section 3.3.1

Public Benefits fiber:

Sections 1.1, 1.2, 2.2.2

For additional detailed Congressional questions and responses regarding Bonneville's fiber-topics program, please see Appendix A.

Table of Contents

1. INTRODUCTION	1
1.1 Bonneville Fiber-optics Program Objectives.....	1
1.2 Revised Fiber-optics Plan	1
1.3 Activities	2
1.4 Fiber Costs	3
1.5 Public Activities.....	3
2.0 BONNEVILLE'S INTERNAL NEEDS	3
2.1 Technical and Operational	3
2.2 Current and Future Operational Needs	5
2.3 Criteria for Installation.....	6
2.4 Activities	7
2.5 Justification of All Fiber-optic Cable Installation Activities: General Authority	8
3.0 BONNEVILLE'S COMMERCIAL LEASE PLAN.....	9
3.1 Introduction.....	9
3.2 Fiber-optic Strategy	10
3.3 Policy.....	11
3.4 Leasing Activities	14
3.5 Financing Fiber-optic Investments	16
 Table 1: Completed Installations (December 1999).....	2
Table 2: Projects Committed for 2000.....	7
Table 3: Future Projects.....	7
Table 4: Planned Capital Expenditures for Fiber-optics	8
Table 5: Current and Projected Fiber-optics Revenues (\$M)).....	15
 Appendix A: Congressional Questions and Responses	
Appendix B: Summary of Public Comments on Bonneville's Fiber-optics Program and Plan	

BONNEVILLE POWER ADMINISTRATION FIBER-OPTIC CABLE PLAN

1. INTRODUCTION

1.1 BONNEVILLE FIBER-OPTICS PROGRAM OBJECTIVES

Requirements

- **Enhance the safety, reliability, and adequacy of the power system.** Bonneville Power Administration (Bonneville) needs to ensure the reliability of its transmission system with a high-speed, flexible, reliable system of communications composed of fiber-optic cable, supplemented in some areas by digital radio. Fiber-optic installation increases Bonneville communication capacity and brings the agency up to date with contemporary technology.
- **Provide for our current and future communications needs.** Bonneville installs fiber-optic cable where there is a demonstrated operational need. Because Bonneville anticipates exponential increases in operational data traffic in the future, it is cost-effective to install cables with (currently) extra capacity.

Opportunities

- **Minimize impacts on Bonneville's Borrowing Authority.** Where possible, structure contractual arrangements for lease of dark, temporarily excess fiber to help Bonneville meet its financial and operational responsibilities, while minimizing the upgrade and operational costs and financial risks. When possible, develop contracts to lease temporarily excess dark fiber with a TSP to achieve a 5-year payback. Deploy any post-payback revenues to reduce future transmission rates.
- **Provide public benefits through the fiber-optic program.** Reserve, from temporarily excess dark fiber, at least four fibers for rural communities, public entities, other federal agencies, and customers.
- **Allow for infrastructure to support a Northwest Regional Transmission Organization (RTO).**

1.2 REVISED FIBER-OPTICS PLAN

- Bonneville will build fiber to meet **operational need**. To meet that need, both short- and long-term, the agency will build backbone routes at 72 fibers. We will retain 16 of those fibers to meet needs over the next 10 years (12 fibers for Bonneville, 4 for Regional Transmission Organization). The need is anticipated to reach 64 fibers by 2018, 76 by 2025. The agency will light Bonneville operational fiber within one year of completed build.
- Bonneville will **lease dark fibers temporarily in excess** of its operational needs, reserving at least four of those fibers for public benefits. We will continue to market temporarily excess fiber via informal private offerings to telecommunications service providers (TSPs). If resources and system conditions allow, Bonneville will take

advantage of market opportunities to accelerate fiber build-out, using a 5-year planning horizon. We will reduce financial risk, and minimize perception of Bonneville intrusion into the marketplace, by working with TSPs to undertake projects through Projects Funded in Advance (PFIA) or lump-sum arrangements.

- Bonneville will allow **third-party or joint ownership** on new fiber-optic projects, where such ownership meets Bonneville pole attachment criteria (currently under revision). In order to maintain the security, reliability, and adequacy of the Bonneville transmission system, Bonneville would maintain those fibers.

1.3 ACTIVITIES

- To date, about 1,975 miles of Bonneville fiber-optic cable have been installed on nine projects, at a cost of about \$127M. Table 1 lists projects that have been completed as of December 1999.

Table 1: Completed Installations (December 1999)

COMPLETED INSTALLATIONS (DECEMBER 1999)				
PROJECT (substation-substation)	MILES	FIBERS	TOTAL COST (M) (loaded)	JOINT PROJECT
Hot Springs-Garrison (western Montana)	120	36	\$10.4	No
Ross-Franklin-Bell (Vancouver, WA to Spokane)	558	36	\$33.9	Yes
Bandon-Alvey (southwest Oregon)	123	36	\$ 4.5	Yes
Keeler-Covington (Portland to Seattle)	197	72	\$14.6	Yes
Alvey-Keeler (Eugene to Portland)	146	72	\$ 8.7	Yes
Ross-Malin (Vancouver, WA to the California-Oregon border)	403	72	\$23.5	Yes
Bell-Covington (Spokane to Seattle)	274	72	\$16.9	Yes
Lane-Fairview (Eugene to Coos Bay)	108	144**	\$11.4	Yes
Olympia - Aberdeen	46	72	\$3.4	Yes
TOTAL	1975	--	\$127***	Yes

* A joint project indicates that TSPs or local utilities participated in funding the fiber-optic project and/or in providing revenues through leasing.

** One project has been built as 144-fiber cable: the TSP asked for this count and offered to pay for it. Because the higher-count build offered advantages to our ratepayers, Bonneville agreed to build at this level.

*** Typical costs per mile are discussed in Section 1.4, following.

- Bonneville administers all fiber-optic installation, and uses either its own construction crew (as available) or expert contract crews to install, depending on outage availability. If no outage is available, and the line must be worked "hot," Bonneville

crews will always do the construction. Overall, about two-thirds of Bonneville's fiber-optic capacity is installed by contract crews.

- Bonneville will always maintain the fiber-optic cables in order to ensure high availability.

1.4 FIBER COSTS

The typical cost of a Bonneville fiber-optic cable build (over the entire system) has been estimated at \$50,000 per mile of cable. This includes the loaded installed cost of all cable installations and includes materials, design, installation, and all other overhead costs. If these costs were expressed as direct (unloaded) figures, the per-mile figure would be \$38,400.

Cost per *fiber*-mile decreases as the size of the cable increases: a 36-fiber cable costs \$1100 per fiber mile; a 72-fiber cable costs \$800 per fiber mile. (For more questions and answers on this subject, please see **Appendix A.**)

To date, \$42.7M has been received from fiber-optics leasing (one-time up-front fee and annual fees to date).

1.5 PUBLIC ACTIVITIES

- Bonneville has initiated a public interconnection/benefits program that reserves at least four fibers from its temporarily excess dark fiber for rural and underserved communities:
 - Bonneville has put in place an agreement with Northwest Open Access Network that allows for public benefit use for rural communities to interconnect with 1000 miles of Bonneville's fiber in the State of Washington. The number of fibers may increase as additional routes are built and additional local communities become involved with this effort.
 - Bonneville is working with CoastNet to provide some fibers for interconnection of rural communities in Oregon. Oregon may choose to work with Northwest Open Access Network, as well as with Idaho and Montana communities
- Bonneville has taken its Fiber-optics Program and Plans out for public comment. Appendix B presents a summary of those comments: in general, rural and underserved communities and consumer-owned utilities approved of the Bonneville approach that builds in opportunities for "public benefit" fiber, while Investor Owned Utilities held that Bonneville's overall approach represented an intrusion into the private marketplace.

2.0 BONNEVILLE'S INTERNAL NEEDS

2.1 TECHNICAL AND OPERATIONAL

Fiber and Reliability. Bonneville requires each of its communication systems to have a reliability of 99.986% to meet Western Systems Coordinating Council requirements (a subset of requirements established by the North American Electric Reliability Council). Bonneville is moving from an analog microwave radio system to a digital system because spare parts and

systems are no longer being made. The agency's digital options were fiber-optic cable, digital microwave radio, and satellite. Satellite was rejected due to long time delays, low bandwidth, and high cost. Therefore, Bonneville is installing a primarily fiber-optic system, supplemented by a digital microwave system. Reliability will remain Bonneville's paramount reason for ensuring high-quality communications.

Under the Transmission System Act, the Bonneville Administrator is required to operate and maintain the system; construct improvements, additions, and replacements; and maintain the stability, reliability, and adequacy of the federal transmission system. As a matter of policy, to ensure the stability, reliability, and adequacy of that, the Administrator, in most instances, actually operates and maintains the system. In any case, the Administrator retains ultimate management and control over the system—must have the power to make the decisions and take the steps necessary for continued operations and maintenance. The North American Electric Reliability Council and the Federal Energy Regulatory Commission recommend that critical telecommunications facilities be the responsibility of the electric utility and that they be under their complete control.¹

Cable Installation. Bonneville installs mostly All Dielectric Self-Supporting (ADSS) cables because they offer the best balance among reliability, cost, and ease of maintenance (alternatives are optical groundwire and helical wrap fiber cable). ADSS cables are purchased in a variety of fiber counts, strengths, and glass types as needed to meet the unique needs of each project. To date, Bonneville has installed standard-sized cables containing 36, 72, or 144² strands of glass for projects that run from 72 to 145 kilometers (45 to 90 miles) in length, depending on the type of terminal equipment used. The range of sizes (fiber count) that Bonneville uses is based on projected future needs for our backbone operational needs; these needs have changed over time. The cable size(s) (fiber count) is quickly evolving for the telecommunications industry, and associated technology, and has reached counts of 432 fibers for an ADSS cable.

- Deregulation requires more capacity to handle a growing number of transactions. System operations require intensive real-time monitoring and controls, high-speed digital control and protection systems, data operation, database matching between control centers, and wide-area measurement systems to monitor power system equipment performance, and help to assure continued system reliability.
- The cost of fiber-optics is less expensive on a life-cycle and per-channel basis than analog or digital microwave radio.
- Fiber-optics has a much greater capacity: Microwave Digital radios are limited to an OC3 system and have a capacity of 2016 voice circuits; fiber-optic and related terminal equipment will be operated at an OC12 and has a capacity of 8064 such circuits. Fiber-optic system capacity can easily be expanded by a factor of 100 or more to meet future need. Digital radios can be expanded only with additional frequencies. Fiber-optic cable is not terrain- and weather-dependent as microwave

¹ Federal Power Commission (now Federal Energy Regulatory Commission) Advisory Committee Report on Reliability of Electric Bulk Power Supply, June 1967, Volume II, page 23; NERC Operating Manual, Policy 7, 1996, page 1-2. Also supported by findings of the National Security Telecommunications Advisory Committee, NSTAC, Telecommunications Systems Survivability Task Force Final Report, February 1990.

² One project has been installed at the 144-fiber level; as noted earlier, the TSP offered to pay for the build, an opportunity to save ratepayers money.

radios are. The cable is projected to last for 40 years. The radios have a 15-year life expectancy.

- Fiber-optics allows the agency to reduce its dependence on Federal radio frequencies. Frequency diversity, which is the mainstay of Bonneville's analog system, is no longer acceptable for radio systems; acquiring new frequencies near metro areas and along the Canadian border is very difficult. Bonneville's options are becoming limited because the Federal Communications Commission (FCC), on behalf of the Federal Treasury, is continuing to auction off government frequencies.
- In locations where Bonneville has passive reflectors and long paths, digital radios cannot be used as a replacement.
- A state-of-the-art communications system increases the value of the region's investment in the existing transmission grid and allows Bonneville to meet future new capacity needs without the environmental impacts of construction (the towers on which the fiber is strung are already in place).

2.2 CURRENT AND FUTURE OPERATIONAL NEEDS

2.2.1 Estimating Future Need

After estimating numbers of fibers needed for reliable operation, Bonneville began installing 36-fiber cables (an industry standard)³ in 1996. Based on the growth in bandwidth requirements of new operational technology, Bonneville expects that the fiber count required to meet operational needs will reach at least 76 fibers by 2025 (see following discussion). Therefore, Bonneville is currently installing 72-fiber cable to meet estimated needs (see Table 2, page 7), depending on area of estimated demand.

Installing a larger (e.g., 72-fiber) cable than is currently required is highly cost-effective in planning for rapidly expanding future agency needs. Current thinking is to install more glass (fiber) at one time, rather than installing additional cables at a later time and dramatically increasing costs. The incremental cost for materials associated with a larger cable is nominal compared to the additional construction costs of repeated installations. However, as noted above, currently Bonneville intends to use 72-fiber cable unless circumstances warrant otherwise.

2.2.2 Determining Fiber-optics Requirements

Bonneville must plan both for its near-term and long-term operational needs for fiber-optic cable. The basic discussion below is supported by material in **Appendix C**: "snapshots" of Bonneville transmission system status and demands at 2008, 2018, and 2025, with corresponding projections of fiber counts needed to support the developing power system. We anticipate operational need for 16 fibers by 2008; for 64 fibers by 2018; and for 76 fibers by 2025.

This projected need is based on a cable life expectancy of approximately 40 years, anticipated expanding future bandwidth demand, and maximum system reliability achieved through redundant glass paths. The fiber number varies depending on high demand areas (such as the North-South Intertie) and lower demand areas in Bonneville's more remote

³ Bonneville's experience indicates that typical industry sizes for cables used for long-haul routes are 36-, 72-, and 144-fiber cables.

locations. Future bandwidth demand will be increased by the need for real-time operational data, RTO traffic, and administrative communications.

In considering reliability, it is important to distinguish between the goals of a telecommunications service provider and that of an electric utility: the TSP seeks to load each fiber with as much data as it can carry (maximizing carrying capacity); the utility seeks to ensure that the power system is secure and controlled: that the lights will stay on. Thus, redundant and independent glass strands are provided in order to accommodate the following major concerns:

- ❑ Direct control paths for transfer trip switching.
- ❑ Dedicated systems on dedicated fiber for different critical functions.
- ❑ Need for more fibers to provide complete redundancy of the fiber use, as more fiber is installed and size of rings is reduced.
- ❑ Spare fiber to be used in case of partial cable damage.
- ❑ Extra fiber that serves as a back-up path for short-term fiber damage in adjacent communication rings.
- ❑ Redundant fiber serving as back-up for long-term, catastrophic, adjacent ring damage.

Ring Reliability: Bonneville currently is installing major rings to provide the backbone communications for the transmission system. These backbone rings are 400 to 800 miles long. The larger the ring, the greater the chance of a failure. To increase reliability, Bonneville will continue to subdivide the large loops into smaller (about 150-mile) routes to provide alternate paths for communications traffic in case a cable is damaged and traffic has to be rerouted in the other direction. This doubles the need for fiber in the backbone rings.

Spare Glass: All fiber-optic cable experiences some glass breakage over time. Rather than replace the cable each time some aging glass breaks, Bonneville has included extra fibers in the cable for backup. The agency has to date only about 5 years experience with fiber, so Bonneville wants to be conservative to ensure that the fiber can be used for 40 to 50 years. In addition, extra fibers are added to take catastrophic events into account. If there is a mudslide in the Columbia River Gorge or a flood in the Willamette Valley, the whole loop can be alternately routed.

2.3 CRITERIA FOR INSTALLATION

Determining where and when to install fiber-optic cable is a multi-step process.

1. Determine operational requirements and priorities. Bonneville's first and foremost criterion for decisions on installing fiber-optic cable for communication is operational need. Operational requirements and priorities are typically defined by the following three factors:
 - What kind of control, protection and data acquisition information is needed to/from Bonneville facilities.
 - What level of availability for the communication system is required (main grid or sub-grid).
 - If main grid, what other reliability considerations are required (e.g., alternate routing, parallel fibers).

2. Identify resource requirements and impacts (capital and staffing needs; workload impacts).
3. Identify current commercial lease opportunities.
4. Where possible, select routes where operational requirements and commercial lease opportunities intersect.
5. However, select and construct projects that carry a "needed now" high operational priority, regardless of the presence of lease opportunities.
6. Consider routes where operational requirements exist and public benefits are possible, even though lease opportunities are not strong.

2.4 ACTIVITIES

The following projects have operational need priority and are proposed to begin in FY 00. However, not all expenditures for these projects will be captured within the FY00 budget.

Table 2: Projects Proposed for 2000

Project	Fiber #	Miles	Cost (\$M)
Seattle - B.C. Border	72	166	\$8
Spokane - Noxon	72	96	\$ 4
Beaverton - Tillamook	72	100	\$ 4.0
Umatilla - LaGrande	72	86	\$ 5.3
Oregon City - Troutdale	72	66	\$ 4.5
Port Angeles - Olympia	72	107	\$ 6.5
Totals	----	621	\$32.3

Table 3: Future Projects (FY01 - 05)

Project	Miles
Noxon - Kalispell - Hot Springs	165
Covington - Blaine #2	92
Keeler - Maple Valley	223
Alvey - Keeler #2	120
Hot Springs - Thompson Falls	25
Alvey - Malin	225
Thompson Falls - Taft	10
Bell - Boundary	100

Project	Miles
Monroe - Chief Joseph (N Route)	120
Bandon - Gold Beach	50
Garrison - Anaconda	45
Franklin - Hatwai	130
Noxon - Hatwai	175
Taft - Bell	96
Swan Valley - Goshen	50
Aberdeen - Allston	135

Bonneville will proceed with construction on any project that becomes identified as a high operational priority. Otherwise, where operational requirements identified in the previous table intersect with commercial opportunities, those projects will be fit into the annual budget constraints shown on the following table.

Table 4: Planned Capital Expenditures for Fiber-optics (FY01 - FY05)

Fiber Budget	Loaded Costs (30%) (\$ Millions)
FY 01	\$ 25
FY 02	\$ 21
FY 03	\$ 17
FY 04	\$ 13
FY 05	\$ 9
Totals	\$ 85

2.5 JUSTIFICATION OF ALL FIBER-OPTIC CABLE INSTALLATION ACTIVITIES: GENERAL AUTHORITY

Bonneville is statutorily mandated under the Transmission Systems Act (16 U.S.C. § 838, et seq.) to operate and maintain the Federal transmission system in the Pacific Northwest.

Also, under the Bonneville Project Act of 1937, Bonneville is mandated to maintain the Federal transmission system in order to continuously provide a reliable source of electric power to its customers. Section 2(c) of that Act states the following:

The administrator is authorized . . . to acquire . . . real and personal property . . . including . . . electric transmission lines, substations, and facilities and structures

appurtenant thereto, as the administrator finds necessary or appropriate to carry out the purposes of this chapter.

Bonneville Project Act, § 2(c) 16 U.S.C. §832.

Consistent with the mandate to provide a reliable source of electric power to its customers, Bonneville acquires communications facilities necessary to operate its transmission facilities reliably. For reliability, security, and adequacy reasons, Bonneville has decided to install and maintain those facilities. This action is consistent with electric utility practice. Bonneville has maintained its own communications facilities under its existing authority.

Bonneville determined that it had the authority, under sections 2(e) and 2(f) of the Bonneville Project Act, to contract to lease fiber-optic cable capacity in excess of its current operational needs. Section 2(e) of the Bonneville Project Act explicitly gives the Administrator the authority to:

sell, lease, or otherwise dispose of such personal property as in his judgment is not required for the purposes of this chapter and such real property and interests in land acquired in connection with construction or operation of electric transmission lines or substations as in his judgment are not required for the purposes of this chapter

Bonneville Project Act, § 2(e) 16 U.S.C. §832

3.0 BONNEVILLE'S COMMERCIAL LEASE PLAN

3.1 INTRODUCTION

Bonneville's Commercial Lease Plan is based on its commitment to upgrade its own communications system, thereby increasing reliability, safety, and adequacy, while minimizing costs to ratepayers. Therefore, it seeks to lease temporarily only those fibers presently excess to Bonneville need, with an eye to recovering the cost of original installation within five (5) years.⁴ Bonneville thus receives the value of the physical asset, as its operational fiber is paid for by lease arrangement of fibers currently in excess of agency need. After payback has been accomplished, any additional revenues are used to moderate rate increases.

The Plan's success is based on six core ideas:

1. **Opportunity.** Bonneville can provide a willing alternative source of dark fiber-optic capacity for TSPs.
2. **Infrastructure.** Bonneville can provide a path via an infrastructure already in place, not only for traffic within the region, but through it.
3. **Reliability.** Bonneville offers experience, core competencies, transferability of skills, and a level of reliability of service that can make it an attractive source of dark fiber in the Pacific Northwest.

⁴ An exception is made for "public benefit" fibers, where a longer payback timeframe is assumed in order to facilitate the closing of the "digital divide."

4. **Public Service.** Bonneville can take advantage of high-revenue city-pair markets, while providing public service to rural or less-advantaged communities near its routes.
5. **Regional and National Value.** Fiber-optics provides an improved communication system to support the reliability, safety, and adequacy of the transmission network; improves customer satisfaction; increases the value of the business; and supports the financial viability of the TBL.
6. **Retrieval:** Bonneville is now structuring its excess dark-fiber lease contracts so that the excess fibers return to Bonneville for use as the agency's operational needs grow.

3.2 FIBER-OPTIC STRATEGY

Bonneville's Fiber-optic Strategy includes the temporary leasing of dark fibers surplus to Bonneville's current needs to TSPs, under a variety of contractual payback plans. The discussion below compares the provisions and impacts of a strategy that would *not* recover costs through leasing (A) with those of the strategy the agency is currently using, which includes cost-recovery through leasing (B).

- **Alternative A: Funded solely by Bonneville (ratepayers).** If Bonneville were to upgrade its communication system solely to meet current and projected operational needs, it would invest in a combination of fiber-optics and radio. To date, costs to install a minimal-sized 36-fiber cable for operational purposes only would have been \$80M to \$100M for the 1,975 miles already built. This entire amount would then be collected from transmission ratepayers, with the following financial implications:
 1. The capital investments would all be funded using Borrowing Authority.
 2. Payback would be 40 years, the average depreciation life used by Bonneville for installed fiber.
 3. By definition, the net present value (NPV) of the investments would be zero, because rates are set to exactly recover costs, including a charge for risk.
 4. Transmission ratepayers would pay for the entire cost of upgrading the communication system, because there would be no TSP revenues offsetting the costs of the fiber-optic investments.
- **Alternative B: Funded by Bonneville (ratepayers) and TSPs.** Bonneville has built to meet high future Bonneville fiber-optic needs (now standardizing on 72-fiber cable; leasing the temporary excess fibers). This means that installations to date have cost \$127M (rather than the \$80 - \$100M noted above). The extra \$27 - \$47M can provide the following financial benefits:
 1. The TSPs provide part of the capital needed to upgrade Bonneville's communication system. This could increase the amount of Borrowing Authority available for Bonneville's other capital needs.
 2. The goal for all projects that involve TSPs is to reduce payback time from 40 years to 5 years.
 3. The NPV is greater than zero for all deals involving TSPs.

4. The transmission rate effect of upgrading communications capability is minimized, because TSP revenues lower the transmission revenue requirement. The 1996 Rate Case anticipated TSP revenues for telecommunication services averaging \$9 million per year, which offset transmission rates.

In addition, the transmission system infrastructure becomes more valuable. The revenues and up-front capital received from the TSPs will make it economically feasible for Bonneville to provide fiber-optics over a much greater portion of the transmission system, perhaps at a faster rate.

3.3 POLICY

3.3.1 Federal

Bonneville installs fiber-optics cable first and foremost to meet its communications needs for a reliable system in an era of increasing data and response demands under deregulation. The Agency seeks to reduce capital costs to ratepayers by arranging for TSPs to lease (temporarily) excess dark fibers that Bonneville does not presently use. Bonneville has no interest in becoming a "common carrier" (see below) or in competing with the private sector. The Agency has taken great care to ensure that its actions are not consistent with those of a "common carrier" under Federal regulations, as noted below.

□ Federal Communications Commission Regulation

Bonneville is not a "common carrier" regulated by the Federal Communications Commission (FCC). Title II of the Federal Communications Act of 1934 is the law under which the FCC regulates "common carriers," TSPs that offer telecommunications services on a universal, nondiscriminatory basis. Bonneville does not fit, and does not wish to fit this category. Bonneville only leases its temporarily excess fiber-optic cable capacity, and then only to selected TSPs that then transmit their own data as part of their business. Consequently, Bonneville is not competing with private sector providers of telecommunications services.

Because Bonneville does not fall within the "common carrier" category, Bonneville is a "private carrier" in terms of FCC jurisdiction. The FCC generally does not regulate "private carriers."

□ Telecommunications Act of 1996

The Telecommunications Act of 1996 allowed electric utilities to enter the telecommunications business, but did not address the issue of the participation of Federal power marketing administrations (such as Bonneville). Consequently, Bonneville is not venturing into the telecommunications business by offering telecommunications services as Tacoma City Light, PGE-Enron, Montana Power, and other utilities are currently doing. **Bonneville has restricted its participation in the telecommunications industry solely to the lease of its temporarily excess unlit fiber-optic cable capacity.**

Consistent with Bonneville's limited participation, Bonneville is not pursuing the provision of lit services because of limitations on the agency's authorities and its

lack of resources to provide such services. Bonneville may respond to requests from other Federal agencies for lit fiber for Federal operational needs.

3.3.2 Bonneville Policy

- **Fiber-optic Pole Attachment Policy.** Bonneville's fiber-optics pole attachment policy is currently under review; changes are being made to allow for potential third-party ownership of fiber-optic cable on Bonneville structures (see Section 3.3.3). Although changes are being proposed, Bonneville must continue to ensure that the transmission system continues to be reliable and safe, and that it operates within our existing standards. Certain criteria will be identified as part of revising the pole attachment policy that will take these concerns into consideration.

Key conditions for Bonneville's existing pole attachment policy are as follows:

- Bonneville owns all fiber-optic cable installed on or entering Bonneville facilities.
 - Only Bonneville crews or Bonneville-approved contractors may install fiber on Bonneville facilities.
 - In all cases, Bonneville shall have exclusive rights to the number of fibers necessary to meet its operational needs, including fibers for redundancy and any other technical requirements.
 - Bonneville operational needs take precedence over needs of third parties. Lease arrangements are limited by Bonneville's operating needs.
- Current and proposed changes to Bonneville's policy for pole attachment or interconnection with TSPs and other electric utilities are summarized by the following points:
 - **Use:** All uses of Bonneville's real property must be approved in advance.
 - **Access Rights:** TSPs and electric utilities must secure their own rights of access to Bonneville's rights-of-way from the underlying landowners.
 - **Connectivity Allowance:** Bonneville allows *Foreign-fiber*⁵ connectivity into Bonneville substations for the exclusive purpose of an electric utility's operational power system needs relating to communication, control, protection, and data acquisition.
 - **Fiber Limits:** The number of *Foreign-fibers* with connectivity into a Bonneville substation is limited to the number of fibers, including spares, that the electric utility needs for power system operational purposes.
 - **Ownership:** A third party may own fiber-optic cable attached to Bonneville transmission structures or facilities, subject to meeting certain criteria. For instance, the third party would have to obtain easement rights from each landowners along the right-of-way. (The access rights noted above cover only entrance to the site—not the placement of fiber-optic cable on the structures.)
 - **Foreign-owned Limits:** Bonneville does not allow foreign-owned commercial facilities, such as regeneration huts, or capabilities inside a Bonneville substation perimeter fence because of safety and reliability considerations.

⁵ "Foreign," as used here, means non-Bonneville fiber or equipment.

- **Pole Attachments.** Attachment of foreign fiber to Bonneville-owned transmission structures has been allowed only in limited circumstances, due to paramount concern for maintaining reliability of the Pacific Northwest transmission system. (May be considered for change.)

In addition to the requirements for obtaining easement rights (above), a third party must also meet standards of reliability to include those of the Western Systems Coordinating Council (WSCC), as well as standards for infrastructure and communications.

- **Public Benefit Fiber.** One important goal of Bonneville activities under the Commercial Plan is to make the cost of end user access in rural areas comparable with the cost of end user access in urban areas. We seek to move towards this goal by reserving four dark fibers (from our currently excess fiber) for public benefits use. (Note that many telecommunications companies have focused on urban areas because the return on investment is higher in dense population areas and will support a legitimate business case; this often leaves rural areas lagging behind.) So long as this objective—to enable rural access rates comparable to urban rates—is furthered, Bonneville will entertain the possibility of contracts with both non-profit and for-profit entities that want to provide telecommunications services to rural areas. Bonneville can provide the following advantages to the rural communities as fiber-optic cable is installed on existing facilities that coincidentally reach many rural communities while, at the same time, reaching Bonneville's facilities. This also allows the local communities to become involved and take the lead in this effort of interconnection with long-haul dark fiber.
 - Bonneville's goal is to provide interconnection to those rural communities that currently have limited or no present telecommunications capacity.
 - If some limited capacity is present, Bonneville's aim is to help ensure that the cost for telecommunications services is comparable to that in an urban area.
 - The availability of Bonneville fiber-optics cable in a rural community could allow an organization to provide services to rural communities for hospitals, schools, libraries, and so on.
 - Bonneville fiber could also bring economic development to rural communities and/or assist them in retaining existing businesses; the stipulation is that communications for these purposes must originate or terminate in the rural area.
 - Bonneville has provided at least four dark fibers for rural communities on all Bonneville fiber-optic cable routes (nine projects as of December 1999).
 - Any entity leasing public benefit fibers from Bonneville is required to comply with state regulatory, registration, and certification requirements, whether or not that entity is defined as a TSP.

3.3.3 Third-party Ownership

Bonneville has traditionally held that only through Bonneville ownership of the cable itself could the needed level of reliability properly be served and the required schedule for upgrade of communications be met. However, in response to expressed interest by third parties in the PNW, that position is being re-examined. We are evaluating proposals from third parties who have expressed an interest in *owning* the cable installed on Bonneville structures, while providing Bonneville with the fibers needed for its operational and reliability purposes. To allow for such an option, we are revising our fiber-optic pole attachment policy (above) and

developing criteria to ensure that the Bonneville reliability, safety, and maintenance needs and standards would be met for communications, infrastructure, and future transmission needs, to name a few. These criteria will include advising the third party of requirements to obtain and pay for easements along the route where Bonneville does not own the underlying land in fee; to negotiate and pay for permits to cross lands, including Bureau of Land Management, Forest Service, and tribal lands; and to understand their responsibility for all taxes. The third party would also be required to obtain a Bonneville permit for crossing Bonneville fee-owned land.

3.3.4 Criteria for Leasing Agreement Decisions

The following conditions determine where and when leasing agreements are made between Bonneville and parties interested in leasing excess Bonneville fibers:

- ❑ Bonneville's operations determine the amount of fiber that can be characterized as "excess" and the terms of its availability.
- ❑ A market analysis (carried out at six-month intervals) helps determine potential rate structure; rates vary, depending on route location, number of fibers, length of term, and numbers of fibers left on any given route.
- ❑ Analysts check the TSP's finances and carry out a risk assessment on the TSP's ability to pay and the likelihood of Bonneville recovering its costs.
- ❑ To minimize risk or loss of investment, Bonneville is continuing to diversify contract types (annual fee or one-time upfront) and customer base.
- ❑ The expected life of a fiber optic cable is about 40 years. Bonneville assesses its operational needs before determining length of term (between 5 and 25 years) to lease fiber on any given contract. Given these facts and Bonneville's planning process before leasing, the agency has not taken back any leased fiber ahead of schedule. Bonneville has anticipated flexibility in operational needs by varying the contract terms.

3.3.5 Land Rights Analysis

It is important to consider the sufficiency of Bonneville's land rights for installing fiber-optic cables. The agency's transmission lines occupy easements that have been acquired over the last 60 years for the purpose of electric power transmission and all related purposes. The easement language can vary significantly from project to project. Most easements provide Bonneville with the right to use the land for "electric power transmission purposes," and they contain specific language for appurtenances, including appurtenant telegraph/telephone and signal lines.

Attachment of fiber-optic cable systems installed for the operation and maintenance of the power system (either by Bonneville by other utilities) is consistent with our land rights. However, Bonneville's easement rights are generally insufficient to support use of third party-owned fiber, where such use would not be in support of the power system.

3.4 LEASING ACTIVITIES

3.4.1 Current and Planned Leasing Summary

The following table shows TSP actual and forecast revenues for FYs 1997 – 2002 for existing and near-term projects. Estimated revenues are in italics.

Table 5: Current and Projected Fiber-optics Revenues (\$M)

1997	1998	1999	2000	2001	2002	2003	Total
\$millions							
1.4	2.1	3.7	10.5	14	15	19.8	66.5

* **Note:** FY97 through FY99 entries represent revenues from audited financial records. Entries for FY 00 - 03 (in italics) are revenues used for the 2002 TBL Initial Rate Proposal.

- Bonneville has received assets (such as terminal equipment, additional new wood poles, construction of access roads, and clearing of the right-of-way) worth \$17M through various agreements with TSPs over the last 5 years. Assets, and projects funded in advance or lump sum fees, are considered as revenues recognized over the life of the contract. Therefore, although about \$42.7 million in assets, annual revenues, and lump-sums has been received to date, the assets and some of the cash receipts are recognized over the life of the contract and included in actual and projected revenues above.

3.4.2 Lease Rate Justification

Based on operating needs, Bonneville will lease temporarily excess fibers for periods of 5 - 25 years. Bonneville is structuring the leasing of its excess fiber capacity to TSPs to result in short (5-year) paybacks of the capital investments. Bonneville uses a single contract format (terms and conditions). However, the agency does not use a single pricing strategy because it believes that using varying pricing strategies can maximize payback.

Several different types of commercial lease arrangements may be negotiated. Each route has a different market rate associated with it. The differences are based on the following:

- city-pair,
- distance between city-pair,
- numbers of fibers leased,
- availability of fibers,
- term of contract,
- primary route vs. backup or redundant route,
- market/route demand,
- presence or lack of available infrastructure,
- capital payback, and
- Bonneville's operational need for the route.

Based on the demand for a particular route, pricing will vary for each route and the value of a route will change over time. Much of the potential risk associated with cost recovery can be mitigated through contractual conditions (see 3.3.2). However, it is important to remember that, as investment risk shifts to the TSP, so does revenue potential. Below are the types of commercial arrangements Bonneville currently uses for its fiber-optics leasing plan.

- 1) **Projects Funded in Advance.** The TSP finances part or all of the costs for materials and installation one-time up-front, in exchange for temporary use of some of the fibers. Bonneville owns all the fiber-optic cable and retains a certain number of fibers

for operational use. The number Bonneville will need for operational purposes will increase over time.

- 2) **Fixed fee.** Bonneville finances the materials and installation of the fiber-optic route. The TSP pays an annual fixed fee for some of the fibers.
- 3) **Equipment/services Agreement.**⁶ Bonneville or the customer may finance construction, depending on the amount of money Bonneville wants to invest in this option—the more equipment or services, the more Bonneville would receive from the customer. This type of arrangement may involve the exchange of equipment or services in lieu of cash payment.
- 4) **Hybrid.** Combinations of 1-3, above. The arrangements discussed in 1 - 3, above, may be combined in an agreement.

Any of these agreements may be tailored to needs in length of time, maintenance costs, and restoration. In all cases where Bonneville funds the fiber-optic installation, Bonneville will own and maintain the entire cable, but will install terminal equipment only for its own operational uses. Commercial lessees will lease temporarily excess dark fiber from Bonneville and will be responsible for providing the electronic terminal equipment that they will need to use.

3.5 FINANCING FIBER-OPTIC INVESTMENTS

Bonneville has two options for financing fiber-optic investments: 1) Federal borrowing authority or 2) cash provided by TSPs. Bonneville uses borrowing authority to finance these projects under the following conditions:

1. when the fiber must be installed in order to meet transmission system requirements and no TSP is interested in leasing the fiber, or
2. when a commercial arrangement with a TSP provides for annual fixed fee or one-time up-front payment agreement.

When no TSP is interested in leasing the fiber (condition 1), the cost of the fiber investment must be recovered from transmission revenues. When the fiber route has an annual fixed-fee agreement or one-time up-front payment arrangement (condition 2), the cost of the fiber is recovered by a combination of TSP revenues and transmission revenues. Bonneville does not issue a specific debt instrument for fiber investments; rather, it issues debt periodically for accumulated transmission capital spending without regard for specific projects.

When Bonneville uses cash provided by TSPs to finance the fiber-optic investment, Bonneville owns the fiber and retains the right to use the fiber for operational purposes. The TSP has a lease agreement with Bonneville to use some of the fibers for a specific term, as identified in the agreement.

⁶ This kind of agreement could stand alone, or could apply to either of the previous options.

APPENDIX A: Congressional Questions and Responses

1. What percentage of Bonneville's fiber-optic capacity is it actually using now for its own purposes?

Response: Nearly all (or about 98%) of the cable routes installed to date will carry Bonneville traffic by the end of calendar year 2000. Bonneville proposes to have lit 2 to 4 fibers on our current system by the end of calendar year 2000; within 10 years, the agency expects to have lit 12 - 16 fibers lit for operational purposes on these routes. This is nearly 30% of the total numbers of fiber installed today.

2. Compared with other power marketing administrations, why is Bonneville spending so much on its fiber-optic system? Bonneville estimated the cost of its fiber-optic system to be about \$50,000 per mile of cable, whereas SWPA estimated its costs at \$18665 per mile and WAPA estimated its costs at \$8421 per mile.

Response: The typical cost of a Bonneville fiber build over our entire system has been estimated at \$50,000 per mile of cable. Bonneville's estimate is the **loaded installed cost of all of our cable installations and includes materials, design, installation and all other overhead costs**. A typical estimate combines the use of different size cables such as a 36-fiber cable at \$40,000 per cable mile or \$1100 per fiber mile, some 72-fiber cable at \$60,000 per cable mile or \$800 per fiber mile.

The latest information available for the three PMAs indicates the following:

- (1) **WAPA's** installed cost per mile is currently estimated at \$10,349 per mile (loaded). WAPA has arranged for other entities to underwrite costs of its cable installation; these contributions are not included in their calculations as part of the "total cost" of cable installation.
 - (2) **SWPA's** latest installed cost-per-mile is estimated at \$39,883 per mile (direct costs, not loaded). SWPA includes all costs (labor, travel, rent, contracts, supplies, and equipment) in their calculations.
 - (3) **Bonneville's** latest typical installed cost per mile, as noted above, is approximately \$50,000 per mile (loaded). If these numbers were reported as direct costs (as SWPA's are), the figure would be \$38,400 per mile. Bonneville reports all costs (as SWPA does), but includes the load (which SWPA does not).
3. Again compared with other power marketing administrations, why is Bonneville building such excess capacity? Bonneville said its fiber-optic cable ranges in size from 36 to 144 fibers, while SWPA said most of its "optical ground wire" contains 12 strands of fiber. While Bonneville's cable has "from 36 to 144" strands of fiber, the Bonneville Administrator told the Appropriations Subcommittee that Bonneville is retaining just 12 fibers for its "short term needs." She also reported that Bonneville has reserved only 20 percent of its total dark fiber optic capacity for the current in-house use of the Federal Columbia River Transmission System.

Response: Bonneville's installations are based on the life of the fiber cable, at least 40 years. Bonneville has determined that our future telecommunication needs on a system

wide/regional basis would best be met by fiber cables of 72 fibers. This number should meet our expanding communication capacity demands, achieve high safety and reliability of the transmission system, and offer critical future flexibility, expansion and reliability options. In the short term (next 10 years - approximately through 2008), Bonneville's best estimate is that it will need 12 fibers for operational purposes. In the longer term (next 20 years), Bonneville conservatively estimates a need for 64 fibers by 2018; and for 76 fibers for operational purposes by 2025. The numbers of fibers needed for operational purposes is expected to increase beyond this number on certain routes.

Six years ago, Bonneville began installing 36-fiber cable to upgrade our aging analog microwave system. Since then, we have determined that this was short sighted and therefore have increased the fiber count to accommodate increasing future needs; we may have to go back to certain backbone routes and install additional fibers to increase to 72-fiber cable. In the meantime, we have standardized on 72-fiber build except for one line, where a TSP asked for a 144-fiber cable build and offered to pay for it. The higher-count build offered advantages to our ratepayers (more fibers available without the upfront cost of construction), so we agreed. Although our standard is now 72-fiber cable installation, we remain open to the idea that there is the potential for our operational needs to increase beyond our recommended numbers, and that this number may change.

4. The Bonneville Administrator told the Appropriations Subcommittee, "Fiber optics are installed by the transmission arm of Bonneville to ensure the operations safety and reliability of the transmission system." How does that narrow purpose justify the magnitude of Bonneville's investment in fiber optic cable? If Bonneville's level of fiber optic cable investment is truly necessary to ensure "operational safety and reliability" of its transmission system then must not the safety and reliability of the other PMAs transmission systems be in grave danger.

Response: Bonneville must reliably operate and maintain the Federal Columbia River Transmission System (FCRTS), which provides about 75 percent of the Pacific Northwest's high-voltage electric energy transmission capacity. The FCRTS includes 15,000 circuit-miles of electric transmission lines and 324 electric substations spread out over 300,000 square miles. The transmission system links large generating resources of 29 dams on the Columbia River in remote regions to several large and growing urban population centers. More than one-third of the transmission system is contracted for moving power (wheeling) for parties other than the Federal government. The managers of the FCRTS work in cooperation with other regional and extra-regional utilities and others to ensure an effective, efficient and highly reliable power system for benefit of the region's population of more than 10 million persons.

Bonneville's justification to upgrade our existing transmission system's telecommunications needs, with this level of fiber-optic investment, is based on meeting our operational safety and reliability requirements. Bonneville—as well as other electric utilities—requires communications systems that they control to operate transmission grids. Bonneville uses redundancy to achieve high reliability and security, which requires more fibers. Bonneville has determined that to keep our system at a high level of reliability and security, we will dedicate layered systems, using separate fibers, for specific needs and uses of the communication system. Radio frequency availability is declining. Only fiber-optic technology offers the appropriate speed, reliability, capacity,

expandability, and affordability. Bonneville has determined that, for its system applications, using lower-count cables is uneconomical. Bonneville's telecommunication architecture requires a first wave of fiber-optic installation forming large backbone rings, to enhance both operational telecommunications and transmission grid reliability. These rings are being subdivided into smaller sub-rings doubling the demands on all cables. While Bonneville is not able to predict the exact amount of fiber required in the future, we do know that extra fibers will offer critical expansion and reliability options. Outages and shortages in the Northeast and Midwest during past years have shown that reliability in other parts of the country is at risk.

5. The information Bonneville provided the Appropriations Subcommittee quotes from an unidentified "report to the Congress on competition" that states "Bonneville wants to support the development of the information super highway." What statute gives Bonneville the mission, responsibility and authority to "support the development of the information super highway"? (We are not asking about Bonneville's authority to lease personal property.)

Response: The April 1999 Department of Energy Competition Report to the U.S. Congress, which was cleared by the Office of Management and Budget, was requested by H.R. Conference Report No. 105-749 (page 90) (1998). That Competition Report states that, "Bonneville is designing and installing this fiber-optic system on its transmission rights-of-way to meet its current and long-term operational needs. Bonneville utilizes its broad contracting and procurement authority to contract out substantial portions of its fiber optic construction. Bonneville's rights-of-way create the opportunity for fiber optic resources to be developed by private telecommunications firms in the region. In this respect, Bonneville wants to support the development of the information super highway by creating opportunities for the private sector to develop the commercial market. In leasing excess fiber-optic capacity, Bonneville is not competing with private telecommunications firms. Bonneville is not selling telecommunications services. Excess Bonneville dark fiber is being leased to private telecommunications firms until it is required for Bonneville operational needs. Dark fiber is non-working fiber-optic cable that has not been lighted by any user to provide telecommunications services." (page 22)

We believe that this report makes clear that Bonneville has not indicated that its mission or responsibility is to support the development of the information super highway. Bonneville can, however, provide an opportunity for rural communities to have access to fiber-optic technologies, because we have fiber-optic cable that is already in or being constructed in those areas to meet our current and future operational purposes and is temporarily in excess of current needs. We have the authority to lease our property. We believe this approach is very consistent with the President's goal, as he stated in his recent State of the Union Address, of having the Executive Branch of the Federal Government work diligently to help bridge the "digital divide." Bonneville is not providing any telecommunications services to these communities. In fact, Bonneville will only make available dark fiber which a private telecommunications company or other telecommunications provider must use to market telecommunications services such as Internet access, voice and data transmission, or other telecommunications needs. Therefore, if a telecommunications provider does not step-in to provide telecommunications services, no telecommunications services are provided. Bonneville is not in the business of providing those commercial services and has no plans to do so

in the future. However, where Bonneville has temporarily excess dark fiber that can be leased to a private telecommunications company for use in rural communities, Bonneville has the authority to provide that company with a lease.

6. At a Bonneville conference in Spokane, Washington, on fiber optics, one of the featured speeches will discuss "fiber optics as an economic development technique". Another speaker argues, "There is an opportunity here for Bonneville to spur the development of a new telecommunications-based economy." What is Bonneville's statutory authority to foster "economic development" by way of its provision of telecommunications facilities? Why should those in the Pacific Northwest get federal assistance in that regard or in gaining access to "the information super highway" if the same assistance isn't provided to all other regions, including those served by the other PMAs or by no PMA? Should the federal government via Bonneville, be competing against private-sector firms to develop a new telecommunications-based economy?

Response: To the extent that Bonneville "fosters economic development," it does so in the manner described in answer 5—creating an opportunity for private telecommunications companies or other telecommunications providers to lease Bonneville's temporarily excess dark fiber because that fiber is already in the area. Bonneville is not competing with private-sector firms, but creates an opportunity for them to have a larger customer base as a consequence of our need for operational fiber in those areas.

7. In several places the information provided the Appropriations Subcommittee states that Bonneville's excess fiber is available to others only until such time as it will be required to ensure the operational safety and reliability of Bonneville's transmission system. What will those who have relied upon the Bonneville fiber for telecommunications purposes do when Bonneville recalls the fiber for its own purposes?

Response: The numbers of fibers and term length of each lease are negotiated with each lessee and are included in the contract. The number of fibers and length of the leases are identified first for Bonneville's operational needs. The lessee knows from the beginning the length of their contract arrangement, and therefore has that length of time to make other arrangements and to plan for their future needs.

8. The Bonneville Administrator told the Appropriations Subcommittee, "Bonneville's excess fiber is marketed at a fair market value." Please list all those that are using Bonneville excess fiber, what they are paying and the duration of their rights to the fiber. For each, was the transaction the result of an advertised competitive bidding process wherein any entity wishing to bid could bid? If the bidding was open to only certain entities, identify those entities and explain why others were excluded. In each case where competitive bids were taken, how many bids were received? If competitive bids were not solicited, why not? How can Bonneville know it actually received "fair market value" in those cases where excess fiber was leased through a process other than advertised competitive bidding open to all entities wishing to bid?

Response: Bonneville is not a telecommunications company or a common carrier. Bonneville has taken every precaution to ensure that it is not leasing temporarily excess fiber in a manner that could characterize Bonneville as a common carrier. Bonneville has

no intention of competing with common carriers and can not provide telecommunications services as they do. Bonneville's fiber communications is for its current and future operational needs. Bonneville needs to have adequate controls on that system, and can not put itself in a position of providing fibers to multitudes of telecommunications providers. Bonneville has acquired knowledge of the fair market value in the Pacific Northwest through the analysis and research completed by outside consultants on a six-month basis. In order to get this information, these consultants contact utilities and telecommunications providers and get information on various routes in the region and their market value. The value of fiber continues to change and updates of the value continues to be an on-going effort.

Leases are negotiated between the Bonneville and the interested party or parties. They generally arise out of the opportunities that exist and evolve in the ever-changing marketplace. The criteria for lease arrangements are provided in the PMA Report to the Congress (attached); additional information is summarized in the answer to Question 11. (Any more detailed information is classified as Business Sensitive: we have been asked through non-disclosure agreements with the TSPs not to discuss certain information.)

9. The Bonneville Administrator told the Appropriations Subcommittee Bonneville "estimates that the market value of the dark fiber optic capacity installed to date, which is in excess of Bonneville's current operational need, is about \$120 million." What percentage of Bonneville's fiber optic capacity does this refer to? Is the \$120 million the estimated market value of that capacity over its life or over some shorter period? How did Bonneville arrive at this dollar estimate? How does the estimated market value compare with the cost of that capacity?

Response: This estimate is based on the approximate market value of 50% of the fiber installed to date. The estimated market value is based on a 20-year period, which is half the anticipated cable life. This dollar amount was estimated based on market research done on various routes within the Pacific Northwest. Bonneville requests a market analysis about every 6 months on existing routes as well as on those future routes that Bonneville needs to reach but that others may not be interested in. The cost and estimated market value are comparable; the approximate cost of the system today is \$127 million and the estimated market value of this existing fiber is around \$127 million.

10. Is it your view that the federal government should be encouraging greater reliance on government to provide telecommunications service? If consumers in sparsely populated areas or poor communities deserve a subsidy in order to have telecommunications service would it not make more sense to give the subsidy directly to those consumers so they could buy service from private providers? If the federal government is going to subsidize the provision of new telecommunications service for those who can't otherwise afford it, why should the federal government favor those served by government providers over those served by private providers?

Response: Bonneville is not in the business of providing telecommunications service. As mentioned above in answers 5 and 6, Bonneville only creates an opportunity for other firms to provide telecommunication services because Bonneville fiber is already in or being constructed in certain areas for its operational upgrade. Leases of public benefits fiber contain restrictions on and requirements for use not found in general-commercial

leases of dark fiber. Those conditions insure the availability of the fiber for use by rural areas.

No aspect of Bonneville's fiber-optic capacity program involves a transfer of taxpayers' funds from the U.S. Treasury to rural communities. Pricing of public benefits is designed to fully recover Bonneville costs at market-based interest rates, with reasonable operating margins to cover risk, over a recovery period of 20 years, which is half of the estimated life of the fiber-optic cable asset. While it is true that the general telecommunications industry standard of cost recovery for commercial fiber is 1.5 to 3 years, the extended recovery period for public benefits fiber allows rural rates that begin at amounts comparable to those available in urban area so that these communities can afford to contract for services from the ultimate telecommunications service provider. Bonneville's pricing of dark fiber in rural areas may provide an earlier entry of these services to those areas. Bonneville does not restrict eligibility for participation in public benefits fiber by business type. The entity contracting with Bonneville may be public or private, profit or non-profit.

11. What is the fully allocated total annual cost (broken down by depreciation, O&M, marketing, contracts and legal overhead, etc) for Bonneville's fiber optic facilities? What is the annual revenue Bonneville receives from each of the following categories of users of Bonneville's excess fiber, private telecommunications firms, investor-owned utilities, other utilities and communities?

Response: The approximate fully allocated annual cost for FY00, based on the \$127M spent to date to build fiber-optics projects, is as follows:

Cost Category	\$Millions
Depreciation	\$3.2
O&M	\$2.0
Marketing, Contracts, Legal	\$0.4
Overhead	\$0.6
Interest	\$7.2
Total	\$13.4

Note: For accounting purposes, the fiber is depreciated at 40 years.

Revenues for FY00 by company type are as follows:

Company Type	\$Million
Private Telecommunication Firms	\$9.975
Investor Owned Utilities	\$0
Other Utilities	\$0.009
Communities	\$0.516
Total	\$10.500

12. How does Bonneville allocate the costs of its fiber-optic cable investment? Is it allocated to Bonneville's transmission revenue requirement or to its power revenue requirement? Why should either transmission or power customers pay for Bonneville's supporting "the development of the information super highway? How are revenues from Bonneville sales

of excess fiber allocated as between Bonneville's transmission and power revenue requirements?

Response: Bonneville installs fiber-optic cable as part of the communications equipment used to operate the Federal Columbia River Transmission System. As such, the cost of the fiber-optic investment is fully included in the transmission revenue requirement. However, revenues from leasing fiber-optic capacity that is in excess of Bonneville's current needs are used to offset the transmission revenue requirement. Transmission customers pay only for the fiber-optic costs associated with Bonneville's present and future use of the cable for operating the transmission system. Allocation of costs and revenues will be discussed in the Transmission Rate Case.

APPENDIX B:

Public Comment on the Fiber-optics Program

- **PUDs and their Associations strongly supported the goals and scope of the Program.**
 - They deemed it prudent utility practice to estimate future need and build with a measure beyond that estimate, citing parallel savings and efficiency in power line construction.
 - They applauded Bonneville's commitment to public benefits fiber, underscoring county and rural needs in underserved areas and comparing the present situation to that in the 1930's, when private concerns were reluctant to invest money in bringing electricity to rural areas and Bonneville took up the task.
 - Thirteen PUDs commented on the Program [Franklin PUD, Wahkiakum County PUD, Douglas PUD, Western Montana Electric Generating and Transmission Cooperative, Clallam County PUD, Idaho Consumer-Owned Utilities Association, Northern Wasco County PUD, Benton PUD, Northwest Open Access Network, PUD No. 2 of Pacific County, PUD No. 1 of Okanogan County, Skamania County PUD No.1, PUD No. 1 of Whatcom County].
 - The Public Power Council also strongly supported the Program, especially for public benefit reasons: ". . . Bonneville is providing a critical public service in ensuring that rural and other underserved areas of the Northwest gain access to modern telecommunications technology, which is becoming increasingly important in being able to attract businesses and economic development."
- **Private interests, including IOUs and their Associations, strongly opposed the goals and scope of the Program.**
 - They held that Bonneville was exceeding its statutory authority (WAPA's fiber build is far lower), creating additional (rates and obsolescence) risk for its transmission customers, and unfairly competing with private concerns that could perfectly well undertake the tasks Bonneville was claiming as its own.
 - They felt that Bonneville had not released enough information to comment properly, and that more was needed.
 - They asserted that the "public benefits" service was an unsupported and "self-fulfilling" prophecy.
 - They asserted that others could do it better and cheaper. Bonneville should (1) sell current fiber assets to a private TSP that would then provide operational fibers for Bonneville need (some asserting that Bonneville could not possibly need more than 12 or, in one case, 2, fibers), or/and (2) allow a private concern to build Bonneville's future fiber system, using Bonneville right-of-way and facilities as supports for the fiber.
 - Fourteen private concerns commented on the Program [Flathead Electric Cooperative; PacifiCorp, Enron Power Marketing, Inc, and Idaho Power Company; Avista; Puget Sound Energy; Montana Telecommunications Association; Alcoa, Columbia Falls Aluminum Company, Kaiser Aluminum and Chemical Corp, and Vanalco; Portland General Electric; Montana Power Company].

**SAMPLING/SUMMARY OF PUBLIC COMMENTS
ON BPS FIBER-OPTIC PROGRAM**

PRO

- "Like any business, Bonneville should be able to use its assets to the greatest benefit to its owners the public." [Email from a private individual from Cheney, WA [rural]]
- "[We] are involved in the evaluation and upgrade of [our] communication system for many of the same reasons Bonneville stated in its recent issue papers and public meetings. We believe that Bonneville's evaluation and upgrade process must not only provide an immediate remedy to today's electric utility communication needs, but also needs to provide capacity and scalable communications technology for the long-term benefit of our customers." [Franklin PUD, others]
- "It is prudent for Bonneville and electric utilities to select the most scalable and cost-effective medium for that [robust communication] system. . . . Even though a utility's current communications system requires a specific number of fibers, an efficient and far-sighted utility will install the quantity necessary for the greatest need it can foresee, plus an additional quantity for yet-unidentified future needs. This is common practice for the utility industry It is good business and a common practice to install the greatest capacity affordable." [Franklin PUD, others]
- Bonneville's objective to emphasize customer service and public benefits to rural communities is commendable and vital to enabling rural areas of the Northwest to survive the transition towards an information economy. . . . The [digital] divide is most apparent in the PNW, and is one of the reasons why the prosperity of the region's metropolitan and suburban areas is not being shared or experienced in rural communities. NW technology companies will not expand or relocate their businesses in rural areas without advanced communications systems. By dedicating the excess capacity of its communications system for public benefits, Bonneville will enable rural communities to participate in the information age and new economy." [Franklin PUD, others]
- ". . . the [TBL] should increase its capital investments for the installation of dark fiber to all areas of the Bonneville service area. Especially the rural communities of Washington and Oregon." [Wahk. PUD]
- ". . . the ICUA [Idaho Consumer-Owned Utilities Association] opposes limitations some propose to place on Bonneville that would unnecessarily prevent the needed mission from being achieved [especially public benefits]."
- Wahk. PUD: [which understands that fiber will be coming through there next year]. **"This installation is eagerly anticipated by the local School Districts as the District has indicated that we will run fiber to the schools free of charge. Also numerous other public entities, and various commercial businesses have contacted the District regarding the availability of wideband communication. As a rural county, with a very small population, private firms are just not interested in providing these types of communication links. No money in it for them."**
- "In addition to our internal operative needs, **Wasco County has lost employment opportunities for lack of adequate communications capability. This program**

has tremendous opportunity to communities such as The Dalles and Wasco County to greatly bolster their industrial development/expansion potential." [N. Wasco PUD]

- "The Public Power Council would like to support unreservedly the continuation of Bonneville's fiber optic program [both building to include currently excess fibers and public benefit]. . . . Bonneville is providing a critical public service in ensuring that rural and other underserved areas of the Northwest gain access to modern telecommunications technology, which is becoming increasingly important in being able to attract businesses and economic development."

CON

- ". . . Bonneville is spending a tremendous amount of money on a communications program that benefits few and may be a springboard for Bonneville to develop another business line at the expense of its transmission customers." [Flathead] [Avista]
- Bonneville should invest only for fiber "clearly necessary for the reliable and secure operation of its transmission system." [Avista]
- Bonneville clearly intends to compete; this is not appropriate for a federal agency. [PacifiCorp et al]. Competition has detrimental effect on other TSPs. [PacifiCorp et al]. Private investment will hesitate to make additional significant investment in F-O infrastructure. [PacifiCorp et al]. Private businesses cannot expect a level playing field and cannot compete with federal advantages. [PacifiCorp et al]. [Puget]
- We find no authorization or federal mandate that permits Bonneville to participate in the communications arena other than for its own operational use." [Flathead Electric Coop] Bonneville has relied on communications provided by private telephone companies; could do so for fiber-optics; ownership and operation are not needed to carry out statutory function; Bonneville proposes to exceed its statutory authority. [PacifiCorp et al] It is up to Congress to determine whether fiber-optic investment is proper, not the Administrator. [PacifiCorp et al] Commenter wants detailed analysis of statutory authority [doubts it covers these actions]. [Puget]
- Bonneville's entering the fiber-optics arena is bad public policy. [PacifiCorp et al] [Puget]
- Bonneville is not subject to meaningful regulation [as are private providers of communications services]. [PacifiCorp et al] [Puget]
- Bonneville is increasing risks and costs for its transmission customers [unnecessarily]. [PacifiCorp et al.] [Avista] Where does this program provide rate stabilization? [Flathead]
- Others [TouchAmerica] have offered to provide service [at a low cost]; Bonneville has turned them down. [PacifiCorp et al]. [Puget]
- Bonneville has invested more than other PMAs (e.g., way above WAPA). [PacifiCorp et al]
- Bonneville's assertion that rural areas are underserved is unsupported (and will become self-fulfilling prophecy). [PacifiCorp et al] [Puget] Bonneville's "recall" policy for third parties would mean that rural communities would lose their fibers later. [PacifiCorp; footnote].

- PacifiCorp uses TSP similar to TouchAmerica proposal: "... have enhanced [its] communication network and have lowered its communication costs."
- Bonneville "should divest its present investment in fiber-optic communication to the highest bidder and ... retain or back access to sufficient fiber-optic capacity to meet its system operation requirements." "... should offer its right-of-way on a nondiscriminatory basis at a price that fully compensates Bonneville for such service [to include access to operational fiber]." [PacifiCorp, Puget] "Bonneville is taking this approach with cellular telephone facilities that are being installed on its rights-of-way ... " [PacifiCorp et al] [Avista] "Providing access to fiber capacity at discounted rates to a particular class of service provider under the pretext of "public benefits" is clearly discriminatory, and unfairly places additional risk upon Bonneville's transmission customers." [Avista] [Puget]
- Technology obsolescence will make it impossible for Bonneville to recover its costs [may not meet other parties' long-term communication requirements] [will therefore impose another burden on transmission customers to pay for excess capacity]. [PacifiCorp et al] [Puget]
- Costs per mile are much higher [cites \$15,000 vs. \$51,000 by TouchAmerica]. [Puget]
- Bonneville should share its business plan (more than just the Issue Paper) to those who are being forced into funding this endeavor." [Flathead] Commenter objects to heavily redacted copies of contracts and wants full disclosure so that they can make detailed comments on proposal. [Puget]
- Bonneville should have sought out public comment on these issues before launching into this "extraordinarily large" spending program. This is a continuing pattern of behavior. [Puget]
- Issue Paper offers limited ("false") choices. Fiber really for power system, not transmission, so PBL should bear large portion of costs. Ignores option of third-party installation and provision of "free" fiber for Bonneville operational needs. [Puget]
- The fiber program works out to a "10% increase in transmission revenue requirements. It has not been sufficiently demonstrated to us that the customers of Flathead Electric will receive enough additional benefits ... to substantiate a 10% increase in transmission rates for this program alone." [Flathead]

Attachment 11

Fiber Optic Cable Investments

The Bonneville Power Administration continues to fund fiber optic communications investments that are needed to meet current and projected Bonneville operational needs in a manner consistent with the attached Office of Management and Budget (OMB) reviewed and cleared Bonneville "Fiber Optic Cable Plan." That plan was transmitted to the Congress on May 26, 2000, in a comprehensive report on the Power Marketing Administration's (PMA) fiber optic communications systems (Fiber Report). The Fiber Report provided OMB and the Congress information on: current and future operational telecommunication needs; current leases, planned leasing costs, and current and projected revenues; lease criteria; cost-per-mile figures; policy on third party co-ownership; and other information relating to Bonneville's fiber optic communications system.

Bonneville is responsible for providing safe, reliable and adequate electric transmission in the Pacific Northwest. Highly reliable communications facilities are integral to assured reliability of Bonneville's high-voltage electric transmission system. Bonneville must move from an outdated analog microwave radio system to a digital fiber optic communications system, supplemented with digital radios. Analog microwave radio is outdated technology, the spare parts and systems are no longer being made, and most importantly, it is no longer sufficient for adequate system reliability. Bonneville has limited the acquisition of fiber optic cable to the size it believes is needed to satisfy its immediate and long-term operational needs.

Bonneville has worked for the last six years to assure that it constructs this critical communications infrastructure at the lowest possible cost to ratepayers. Consistent with sound business principles, Bonneville has leased temporarily excess dark fibers to telecommunications service providers for a term of years. The revenue that Bonneville generates from these leases reduces the cost of the transmission system. BPA is committed to repaying the initial fiber optic investments as fiber revenues exceed fiber operating costs and FERC-approved transmission rate case commitments are met.

Bonneville does not compete with telecommunications providers, but works cooperatively with them to accommodate (when possible) their requests for leases of dark fibers. The telecommunications service providers provide their own optical terminal equipment to "light" the fiber and sell their telecommunications products and services. Bonneville does not sell any lit telecommunications products and services. The May 26, 2000, Fiber Report notes that, "all three PMA's have made temporary excess dark fiber available for leasing," and that "none of the three PMA's provide communications capacity across lighted fiber (lighted fiber services) for commercial purposes."

Bonneville has continued to update OMB staff on the status of our fiber program since the transmittal of the May 26, 2000, Fiber Report. Bonneville has informed OMB staff that Bonneville currently has decreased the level of its fiber investments as it has had to focus its limited resources on electric transmission infrastructure investments required

immediately to relieve transmission capacity bottlenecks on the system, including preservation of inter-regional Direct-Current Intertie capacity. Fiber investments also have been refocused in this area since communications control functions are critical to the reliability of the system. OMB staff on June 8, 2001, asked Bonneville staff to answer six questions regarding updated FY 2000 data on: miles of Bonneville fiber optic cable previously planned to be installed and actually installed, as well as the miles of cable planned to be leased and actually leased; planned vs. actual fiber lease revenues; planned fiber expense vs. actual fiber expenses; current repayment of fiber projects and the current expected life of Bonneville fiber projects. Bonneville staff provided OMB staff the attached answers to those questions on June 21st and again at OMB's request on August 31st.

OMB staff has asked to review annual principal and interest payments for each Bonneville fiber project that has been installed. Bonneville has indicated that it does not borrow for specific fiber projects, and that the actual principal and interest cannot be calculated for specific fiber projects as Bonneville determines its cash borrowing requirements on the total construction program, capital spending, and available borrowing authority. OMB staff is aware that Bonneville staff has been making a substantial effort to provide OMB staff with an internal rate of return and net present value analysis of Bonneville fiber investments. Bonneville staff completed the analysis and provided it to Bonneville management on October 28th. The assumptions and results of that analysis are summarized below. Bonneville staff is available to discuss this analysis with OMB.

The Bonneville staff analysis reviewed the existing Bonneville fiber projects from FY 2001 to FY 2021. All capital costs were loaded upfront, and any private sector (telecommunications provider) lump sums or upfront cost-sharing payments were loaded in the initial year of analysis. Revenues from existing excess dark fiber leases with revenues over several years were embedded in yearly revenues, which includes yearly fiber maintenance revenues. Currently, given already signed dark fiber leases, the fiber program still has 26% available short-term capacity. Staff has assumed an 8% increase in revenues in the next three years based on current inquiries. Staff has assumed that first year prices for any new dark fiber leases would be reduced by 15%. Staff assumed that fiber maintenance expenses will inflate at 3% per year, and administrative costs will equal 0.5% of revenue. Fiber maintenance costs were assumed at \$143 per route mile. Cash flows were discounted at 9% as were other transmission system investments. Given that the fiber has a much longer life than 20 years, the net book value at the end of 20 years was assumed to be 50%. The recognition value in the 20th year was also present valued.

Capital spending for fiber optics is funded from Bonneville's constructions bond issuances, which are issued to replenish capital spending for a wide range of transmission-related activities.¹ For the period January 1996 through the date of the Bonneville staff

¹ Bonneville issues bonds to the U.S. Treasury for each of its five programs: constructions, associated projects, fish and wildlife, conservation, and environment. The bonds are issued after a significant accumulation of capital spending within any one of the five programs. In effect, capital spending is funded

analysis, Bonneville has issued \$1,427 million in construction bonds to finance a variety of transmission construction projects. The average coupon rate of these bonds was 6.32%. The fiber investment from FY 1996 to FY 2000 was \$133.6 million, approximately 9.4 percent of the construction program during that period. Total estimated dark fiber lease revenue on existing contracts is \$265.1 million. In total, the fiber program is expected to produce revenue of \$288.7 million over twenty years. Ninety-two percent (92%) of the total expected revenue is under contract already. The projected cost of goods (fiber maintenance) is estimated at \$7.9 million or 3% of total revenue. The projected operating expenses are \$4.3 million or 1% of total revenue. Bonneville staff estimates that Bonneville fiber investments will be repaid within nine years using the payback method, well before the end of the useful service life of the fiber equipment. The fiber investments have a Net Present Value (NPV) of \$16.9 million or an Internal Rate of Return (IRR) of 10.88% with a 9% discount rate.

Bonneville continues to affirm that it is making fiber optic cable investments that are necessary to meet both current and long-term operational needs, in a manner consistent with (1) the May 26, 2000, Bonneville "Fiber Optic Cable Plan," (2) reducing transmission system costs to Bonneville's ratepayers, and (3) preserving scarce borrowing authority which is also required for other high priority electric power system infrastructure investments. The pace of fiber installation throughout Bonneville's transmission system has been slowed as Bonneville has had to reprioritized its construction investments on relieving bottlenecks on high priority electric transmission infrastructure.

We believe that the information provided to OMB on the Bonneville's fiber optic cable investments is fully responsive to your needs. Bonneville staff is available to OMB to further discuss this program.

initially out of Bonneville's cash reserves. When a bond is issued, the bond proceeds replenish Bonneville's cash reserve account.

Sandford, Sue - DFF-2

From: Hawken, Mary - DFF-2
Sent: Friday, June 21, 2002 5:53 PM
To: Sandford, Sue - DFF-2
Subject: FW: Borrowing Authority

6 of 6

-----Original Message-----

From: Taves, John - KR-7C
Sent: Friday, September 14, 2001 5:21 PM
To: 'Cavanagh, Ralph (BEF)'; 'Hirsh, Nancy (NVEC)'; 'Weiss, Steve (NVEC)'
Subject: Borrowing Authority

Ralph, Nancy and Steve,

I have now had time to do a little more thorough homework on your concerns over borrowing authority language than I had when I first responded. I thought it would be good to share the results with you. In the following material, I have added the underlining.

First, BPA believes the authorization language in the Federal Columbia River Transmission System Act of 1974, as amended by the Regional Power Act of 1980 gives us the authorization to use our borrowing authority for conservation and fish and wildlife recovery purposes as well as transmission and other purposes which are responsibilities of the Administrator. Section 838k(a) of the amended act states "The Administrator is authorized to issue and sell to the Secretary of the Treasury from time to time in the name and for and on behalf of the Bonneville Power Administration bonds, notes, and other evidences of indebtedness . . . to assist in financing the construction, acquisition, and replacement of the transmission system, to implement the administrator's authority pursuant to the Pacific Northwest Electric Power Planning and Conservation Act . . . (including his authority to provide financial assistance for conservation measures, renewable resources, and fish and wildlife . . .) ." This authorization would not be preempted by language Senator Bingaman's proposed electricity industry restructuring bill, although it is true we would prefer the language not appear restrictive. The only value of having language in the Bingaman bill concerning our borrowing authority is that it suggests to the appropriations committees that the Senate supports the idea of spending this money.

The appropriations bills are the ones that are really important to us at this point. As I said above, our authorization regarding what we can do with appropriated funds is already clear and broad. What we now need is to be awarded the actual appropriation. The bill coming out of the Senate appropriations committee states that "For purposes of appropriating funds to assist in financing the construction, acquisition, and replacement of the transmission system of the Bonneville Power Administration up to \$2,000,000,000 in borrowing authority is authorized to be appropriated, subject to subsequent annual appropriation, to remain outstanding at any given time" However, the report language accompanying the bill states "A total of \$3,750,000,000 has been made available to Bonneville as permanent borrowing authority. Each year the Committee reviews the budgeted amounts Bonneville plans to use of this total and reports a recommendation on these borrowing requirements. For fiscal year 2002, the Committee recommends an additional increment of \$374,500,000 in new borrowing authority, the same as the budget request, for transmission system construction, system replacement, energy resources, fish and wildlife, and capital equipment programs." The report language also notes that " . . . the Federal Columbia River Transmission System Act of 1974 placed Bonneville on a self-financed basis. With the passage in 1980 of . . . the Pacific Northwest Electric Power Planning and Conservation Act, Bonneville's responsibilities were expanded to include meeting the net firm load growth of the region, investing in cost-effective, nationwide energy conservation, and acquiring generating resources to meet these requirements."

The one concern we have with the Senate appropriations language is with the phrase "subject to subsequent annual appropriation."

To sum up, then, we believe we already have broad authorization regarding the purposes (including conservation, fish and wildlife and non-transmission alternatives to poles and wires) for which we can make expenditures and this will not be compromised by the language of the proposed restructuring or appropriations acts. We believe it is important to maintain the Administrator's flexibility in deciding to allocate actual expenditures across these purposes, but we need to have the assurance that sufficient borrowing authority will be available over the coming years to embark on multi-year projects without being held hostage to annual appropriations bills.

One last thing to keep in mind: The bill coming out of House appropriations committee is silent on new borrowing authority. Therefore, the next step is the conference committee, where the House and Senate bills will be merged into a

single bill. This is ultimately the bill that we need insure provides the support we really need for the coming years.

I hope this is clear. Please let me know if you have questions.

John

**The Deputy Secretary of Energy**

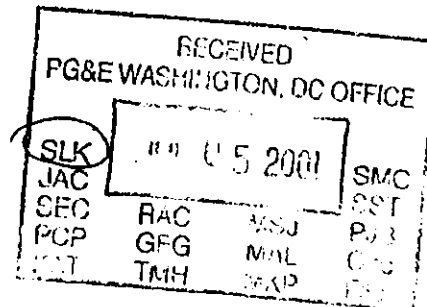
1000 Independence Avenue, S.W.

Washington, D.C. 20585

(202) 586-5500 • FAX (202) 586-0148

July 3, 2001

Mr. Steven L. Kline
Vice President
Federal Government & Regulatory Relations
PG&E Corporation
700 11th Street, NW, Suite 250
Washington, DC 20001



Dear Mr. Kline:

Thank you for your letter of June 25, 2001, expressing your support for improving the Bonneville Power Administration's ability to deliver power in the West. The Secretary has asked me to respond directly to you.

Your letter highlights the significance of our Nation's aging transmission system to ensuring a reliable electrical system. In fact, I understand that much of Bonneville's infrastructure is over 40 years old. This Administration is very concerned about constraints in the transmission system around the country. To focus on this problem, the President's National Energy Plan includes recommendations that call for an assessment of the need for a nation-wide grid to address these transmissions bottlenecks. We are in the initial phases of that effort at this time.

Your letter supports additional Federal borrowing authority for Bonneville to finance transmission construction. The President's plan also calls for a review of Bonneville's capital and financing requirements with an eye towards determining whether additional Treasury financing is warranted. We are undertaking that review at this time and expect to have a better idea of the total requirement soon.

I appreciate your insights on this issue and will consider them as Bonneville's proposal proceeds.

Sincerely,

Francis S. Blake





89

SENATOR CONRAD BURNS

Montana

TO Jeff Stier

COMPANY _____

FAX # _____

DATE _____ TIME _____

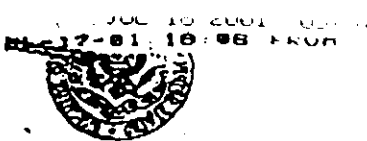
PAGES (INCLUDING THIS) 4

SUBJECT _____

FROM F/Int

COMMENTS _____

United States Senate Washington D C 20510 2603 (202) 224 2644 FAX (202) 224 8594
Home Page <http://burns.senate.gov>
email conrad_burns@burns.senate.gov



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

July 17, 2001
(Senate Floor)

STATEMENT OF ADMINISTRATION POLICY

(THIS STATEMENT HAS BEEN COORDINATED BY OMB WITH THE CONCERNED AGENCIES.)

ENERGY AND WATER DEVELOPMENT APPROPRIATIONS BILL, FY 2002 (Sponsors: Byrd (D) West Virginia; Reid (D) Nevada)

586-6762

This Statement of Administration Policy provides the Administration's views on the Energy and Water Development Appropriations Bill, FY 2002, as reported by the Senate Committee. The Administration appreciates the Committee's efforts to fund agencies and programs at the President's request, however, we are concerned that the Senate version of this bill exceeds the President's request by nearly \$2.5 billion. The Administration looks forward to working with the Congress to ensure mutual priorities are addressed in the budget resolution. The Administration would like to take this opportunity to share some concerns with the Senate Committee version of this bill, as noted below.

Department of Energy

The Committee action on both the Energy/Water and Interior appropriations bills is consistent with and largely supportive of the President's National Energy Policy. On May 17th, with the release of the President's National Energy Policy, the President directed the Department of Energy (DOE) to undertake a review of existing energy efficiency and alternative and renewable energy research and development (R&D) programs to ensure future program budget allocations are performance-based and modeled as public-private partnerships. Based on the Secretary of Energy's preliminary review, the Senate Committee's action in both bills to include additional \$534 million for energy efficiency and renewable energy R&D may be supportive of the President's objectives.

The Administration looks forward to working with Congress through conference to refine the allocation of resources to those programs that most effectively meet performance-based criteria. We will also work with Congress to fund the most efficient program alternatives, reducing lower priority program resources. In particular, the Administration believes it is necessary to leverage applied R&D funds to a greater extent by increasing the industry cost share, which would be particularly useful in some DOE programs, especially as R&D projects move toward commercialization.

The Administration appreciates the Committee's support for DOE's National Nuclear Security Administration and Environmental Management programs, but does not support the Committee's addition of \$1.7 billion over the request for these programs. Although these increases are intended to address problems in meeting certain program milestones at the current funding level, the increases would not encourage a cost-effective use of program funds.

or address needed program management improvements. This is particularly true of the Committee's addition of \$300 million for a new DOE infrastructure program. Before providing such significant sums, it is important that DOE put in place specific management processes to correct the causes of the current DOE infrastructure situation, such as establishing infrastructure priorities, evaluating potential efficiencies, and improving its tracking of current infrastructure spending. The Administration also notes that numerous Defense studies are still ongoing and we should await their outcomes before providing additional resources above the President's request.

The Administration strongly objects to the Committee's reduction of \$170 million for the Office of Civilian Radioactive Waste Management. The \$275 million provided is insufficient to carry out the statutory requirements of the program. It would require an immediate suspension of scientific work and result in a loss of key scientific personnel. The Federal government would lose the ability to sustain forward momentum in this program, and incur increased liability due to further delays in meeting its obligations. Significantly underfunding this program would likely leave no path forward for removing the Department's spent nuclear fuel and high-level radioactive wastes at Hanford Reservation, Savannah River Site, West Valley, New York, and Idaho National Environment and Engineering Laboratory. This could have serious repercussions for our national defense and could subject the Department to further litigation.

In addition, the Administration objects to the \$2 billion increase in borrowing authority for the Bonneville Power Administration (BPA) because it is not needed at this time to fund BPA's planned expenditures. However, the Administration appreciates the need for additional investment in electricity infrastructure and will work with the Congress to ensure that adequate private and public resources are available to conduct an effective capital investment program. As discussed in the National Energy Policy Report, the Secretary of Energy is analyzing transmission system bottlenecks and ways to remove them. It is in this context that the Administration is reviewing capital and financing requirements. The President's budget fully funds BPA's planned expenditures through at least FY 2003. Moreover, the Senate bill would prohibit BPA from using any of this additional authority in FY 2002, highlighting the view that this increase is not needed at this time, while clouding recognition that it would absorb \$2 billion in outyear budget resources and is tantamount to a significant new advance appropriation. We therefore urge the Senate to delete this provision.

Army Corps of Engineers

The Administration appreciates the Committee's efforts to address Administration funding priorities for the Army Corps of Engineers Civil Works program. However, the Administration is concerned about the Committee's increase of \$405 million over the request for Corps programs. We can have a strong water resources program at the funding level proposed in the budget by establishing priorities among projects. The Administration is particularly concerned that the Committee's bill contains approximately \$240 million for 260 specifically identified projects and activities that were not included in the President's budget (over \$120 million more than were included for such projects in last year's Senate bill). Given the large amount of funding needed to complete the backlog of construction projects already underway (over \$21 billion), the President's budget focused on completing ongoing projects rather than starting construction of new projects that would add to this backlog and increase delays in completing ongoing projects. We urge the Senate to limit the number of earmarked projects and to focus funding on economically justified, environmentally acceptable projects that address the

Corps' principal mission areas.

Bureau of Reclamation

The Administration appreciates the Committee's funding that supports the goals of the California Bay-Delta Restoration Program (CALFED) program.

Nuclear Regulatory Commission (NRC)

The Administration objects to language included in the Committee Report that would block the NRC from revising a regulation governing the use of medical isotopes. There are annually more than 11 million medical procedures for the diagnosis and treatment of disease that use radioactive materials. This regulation, adopted by the Commission in October 2000, would reduce the regulatory burden on the public while maintaining radiation safety of workers and the public. The regulation is currently undergoing review by OMB, and we urge the Senate to delete this provision that would leave in place the existing, more burdensome regulation.

Infringement on Executive Authority

The Administration objects to the provision in Section 303 in the Committee bill that would require Committee approval before Executive Branch execution. The Administration will interpret this provision to require only notification of Congress, since any other interpretation would contradict the Supreme Court ruling in INS v. Chadha.



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

July 17, 2001
(Senate Floor)

STATEMENT OF ADMINISTRATION POLICY

(THIS STATEMENT HAS BEEN COORDINATED BY OMB WITH THE CONCERNED AGENCIES.)

ENERGY AND WATER DEVELOPMENT APPROPRIATIONS BILL, FY 2002 (Sponsors: Byrd (D) West Virginia; Reid (D) Nevada)

This Statement of Administration Policy provides the Administration's views on the Energy and Water Development Appropriations Bill, FY 2002, as reported by the Senate Committee. The Administration appreciates the Committee's efforts to fund agencies and programs at the President's request, however, we are concerned that the Senate version of this bill exceeds the President's request by nearly \$2.5 billion. The Administration looks forward to working with the Congress to ensure mutual priorities are addressed in programs throughout the government, and that discretionary funding is within the levels agreed to in the budget resolution. The Administration would like to take this opportunity to share some concerns with the Senate Committee version of this bill, as noted below.

Department of Energy

The Committee action on both the Energy/Water and Interior appropriations bills is consistent with and largely supportive of the President's National Energy Policy. On May 17th, with the release of the President's National Energy Policy, the President directed the Department of Energy (DOE) to undertake a review of existing energy efficiency and alternative and renewable energy research and development (R&D) programs to ensure future program budget allocations are performance-based and modeled as public-private partnerships. Based on the Secretary of Energy's preliminary review, the Senate Committee's action in both bills to include an additional \$334 million for energy efficiency and renewable energy R&D may be supportive of the President's objectives.

The Administration looks forward to working with Congress through conference to ensure the allocation of resources to those programs that most effectively meet performance-based criteria. We will also work with Congress to fund the most efficient program alternatives by reducing lower priority program resources. In particular, the Administration believes it is necessary to leverage applied R&D funds to a greater extent by increasing the industry cost share. This would be particularly useful in some DOE programs, especially as R&D projects move closer to commercialization.

The Administration appreciates the Committee's support for DOE's National Nuclear Security Administration and Environmental Management programs, but does not support the Committee's addition of \$1.7 billion over the request for these programs. Although these increases are intended to address problems in meeting certain program milestones at the requested funding level, the increases would not encourage a cost-effective use of program funds or address needed program management improvements. This is particularly true of the

Committee's addition of \$300 million for a new DOE infrastructure program. Before providing such significant sums, it is important that DOE put in place specific management processes to correct the causes of the current DOE infrastructure situation, such as establishing infrastructure priorities, evaluating potential efficiencies, and improving its tracking of current infrastructure spending. The Administration also notes that numerous Defense studies are still ongoing and we should await their outcomes before providing additional resources above the President's request.

The Administration strongly objects to the Committee's reduction of \$170 million for the Office of Civilian Radioactive Waste Management. The \$275 million provided is insufficient to carry out the statutory requirements of the program. It would require an immediate suspension of scientific work and result in a loss of key scientific personnel. The Federal government would lose the ability to sustain forward momentum in this program, and incur increased liability due to further delays in meeting its obligations. Significantly underfunding this program would likely leave no path forward for removing the Department's spent nuclear fuel and high-level radioactive wastes at Hanford Reservation, Savannah River Site, West Valley, New York, and Idaho National Environment and Engineering Laboratory. This could have serious repercussions for our national defense and could subject the Department to further litigation.

In addition, the Administration objects to the \$2 billion increase in borrowing authority for the Bonneville Power Administration (BPA) because it is not needed at this time to fund BPA's planned expenditures. However, the Administration appreciates the need for additional investment in electricity infrastructure and will work with the Congress to ensure that adequate private and public resources are available to conduct an effective capital investment program. As discussed in the National Energy Policy Report, the Secretary of Energy is analyzing transmission system bottlenecks and ways to remove them. It is in this context that the Administration is reviewing capital and financing requirements. The President's budget fully funds BPA's planned expenditures through at least FY 2003. Moreover, the Senate bill would prohibit BPA from using any of this additional authority in FY 2002, highlighting the view that this increase is not needed at this time, while clouding recognition that it would absorb \$2 billion in outyear budget resources and is tantamount to a significant new advance appropriation. We therefore urge the Senate to delete this provision.

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The Administration appreciates the Committee's efforts to address Administration funding priorities for the Army Corps of Engineers Civil Works program. However, the Administration is concerned about the Committee's increase of \$405 million over the request for Corps programs. We can have a strong water resources program at the funding level proposed in the budget by establishing priorities among projects. The Administration is particularly concerned that the Committee's bill contains approximately \$240 million for 260 specifically identified projects and activities that were not included in the President's budget (over \$120 million more than were included for such projects in last year's Senate bill). Given the large amount of funding needed to complete the backlog of construction projects already underway (over \$21 billion), the President's budget focused on completing ongoing projects rather than starting construction of new projects that would add to this backlog and increase delays in completing ongoing projects. We urge the Senate to limit the number of earmarked projects and to focus funding on economically justified, environmentally acceptable projects that address the Corps' principal mission areas.

Bureau of Reclamation

The Administration appreciates the Committee's funding that supports the goals of the California Bay-Delta Restoration Program (CALFED) program.

Nuclear Regulatory Commission (NRC)

The Administration objects to language included in the Committee Report that would block the NRC from revising a regulation governing the use of medical isotopes. There are annually more than 11 million medical procedures for the diagnosis and treatment of disease that use radioactive materials. This regulation, adopted by the Commission in October 2000, would reduce the regulatory burden on the public while maintaining radiation safety of workers and the public. The regulation is currently undergoing review by OMB, and we urge the Senate to delete this provision that would leave in place the existing, more burdensome regulation.

Infringement on Executive Authority

The Administration objects to the provision in Section 303 in the Committee bill that would require Committee approval before Executive Branch execution. The Administration will interpret this provision to require only notification of Congress, since any other interpretation would contradict the Supreme Court ruling in INS v. Chadha.

Baskerville, Sonya - LT-7

From: Stier, Jeffrey K - KN-DC
Sent: Wednesday, April 03, 2002 6:03 AM
To: BALL, Crystal; BASKERVILLE, SONYA; BENNETT, RUTH; COHEN, RACHELLE; CRAWFORD, BRYAN; CURTIS, JAMES; EVANS, BARTON; FOX, ROY; HAWKEN, MARY; HICKOK, STEVEN; HUNT, KAREN; JOHNSON, FREDERICK; LEFLER, VALERIE; MAHAR, DULCY; MAHER, MARK; MEYER, CHARLES; MOSEY, EDWARD; NORMAN, PAUL; OLDS, PEGGY; PYRCH, JOHN; ROACH, RANDY; SEIFERT, ROGER; SILVERSTEIN, BRIAN; STAUFFER, NICOLE; VANZANDT, VICKIE; WEEDALL, MICHAEL; WHITNEY, CAROLINE; WRIGHT, STEPHEN; ZIMMER, PAT
Subject: FW: spratt on borrowing authority

fyi

-----Original Message-----

From: Vinson, Tom [mailto:Tom.Vinson@mail.house.gov]
Sent: Tuesday, April 02, 2002 6:00 PM
To: 'jkstier@bpa.gov'; 'racohen@bpa.gov'
Subject: spratt on borrowing authority

FYI...peter got a response today from spratt regarding our request for additional borrowing authority. while most of the letter is a pat response about the problems with the republican budget, it starts with the following:

"Thank you for your letter regarding the fiscal year 2003 budget. I agree that increasing the borrowing authority for the Bonneville Power Marketing Administration (BPA) is needed.

As you know, both the President's budget and the House Republican budget included a \$700 million increase in borrowing authority for BPA. While this falls short of the \$2 billion BPA initially requested, it is certainly a step in the right direction.

Even though the 2003 budgets include this important change for BPA.....(then it goes into anti republican budget rhetoric)"

nice to know spratt's on board!

Tom Vinson
Legislative Director
Representative Peter DeFazio (OR-04)
2134 Rayburn House Office Building
WDC 20515
ph: 202-225-6416
fx: 202-225-0032

Congress of the United States

Washington, DC 20515

March 8, 2002

The Honorable Jim Nussle, Chairman
The Honorable John Spratt, Ranking Member
House Committee on the Budget
Washington, D.C. 20515

Dear Chairman Nussle and Ranking Member Spratt:

As you know, the President has requested that Congress increase the Bonneville Power Administration's (BPA's) permanent borrowing authority by \$700 million. We are writing to urge you to accommodate not less than \$700 million in increased borrowing authority for BPA in the Fiscal Year 2003 Budget Resolution.

The Pacific Northwest is facing a shortage of both electricity generation and transmission capacity. As the owner and operator of about 75 percent of the region's high voltage transmission, BPA has identified actions that must be taken to address these shortages, including construction projects to reinforce the grid, integrate new generation and make federal hydroelectric generation more efficient. These actions will require significant new capital investment, which will exceed BPA's current borrowing authority limit by as early as Fiscal Year 2004. If BPA is to help both the region and the West as a whole avoid the recurrence of the past year's power crisis, the agency requires an immediate increase in its statutory limit of \$3.75 billion in Treasury borrowing authority.

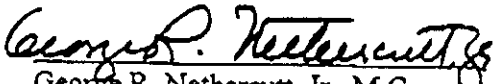
As the past year's events have made clear, a combination of changes brought about by wholesale electricity restructuring and load growth throughout the West have increased the use of the transmission system while keeping new investment in the system down. Bonneville has responded by using all the efficiencies, technical upgrades and additions available to carry more electricity through the system. These efficiencies are now in place and the transmission system is operating at or near capacity. With the margin in the system near or at its limit, Bonneville is becoming more concerned with reliability and increased risk of system failure.

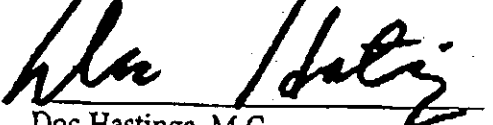
In addition, more than 20,000 megawatts of new generation have been proposed in the Northwest, with about 3,000 megawatts already coming online. Bonneville has used all available techniques short of line construction to upgrade the existing transmission system. The grid must be reinforced through new construction to maintain current reliability, meet new load growth, and carry the new generation from plant to point of use.

It is also important to note that the proposed regional transmission organization (RTO West) is not expected to begin operation until FY04 at the earliest. Meanwhile, construction of a new transmission project takes 3 to 5 years to complete. In any case, under the RTO West proposal, the individual transmission system owners - like BPA - will continue to be responsible for financing capital construction within their systems. Moreover, for both economic and federal ownership reasons, BPA cannot rely on third-party financing as a sure source for investment funding.


This is a matter of vital importance not only to the Pacific Northwest, but to the entire Western U.S., since BPA's transmission system is essential to the proper functioning of Western electricity markets. We respectfully urge and request that you accommodate not less than \$700 million in increased borrowing authority for BPA in the FY03 Budget Resolution.


Sincerely,

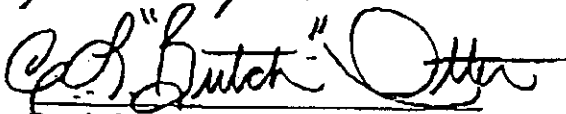

George R. Nethercutt, Jr., M.C.


Doc Hastings, M.C.


Jennifer Dunn, M.C.


Greg Walden, M.C.

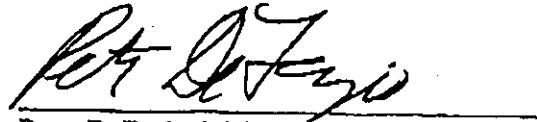

Mike Simpson, M.C.

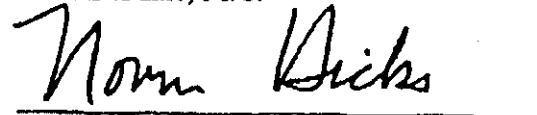

Butch Otter, M.C.


Dennis Rehberg, M.C.

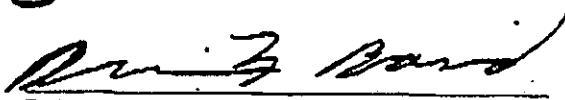

Earl Blumenauer, M.C.

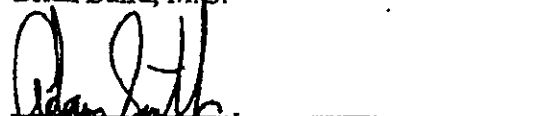

Rick Larsen, M.C.

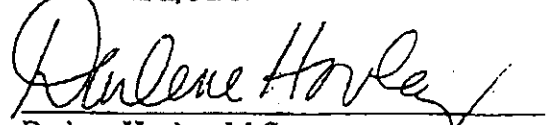

Peter DeFazio, M.C.

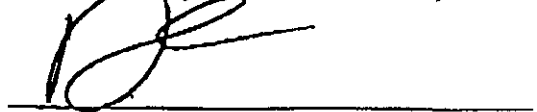

Norm Dicks, M.C.



Jim McDermott, M.C.


Brian Baird, M.C.


Adam Smith, M.C.


Darlene Hooley, M.C.


David Wu, M.C.


Jay Inslee, M.C.

William D. Palmer
01/04/2002 03:58:26
PM

Record Type: Record

To: gale.kabat@hq.doe.gov

CC:

Subject: BPA borrowing authority

Attached are two sheet that address BPA's new borrowing authority. Attachment 1 is a summary statement that OMB wants to place in the BPA section of the budget appendix that describes BPA's FY 2003 programs. Attachment 2 is an elaboration of the summary and provides the conditions for BPA's use of the new authority. As I understand it, this information was provided to DOE/BPA at the time of appeals. We are asking for comments by Monday COB on the section that will appear in the appendix.

Would you please make certain that the appropriate people in the budget office receive a copy of this and that it is also delivered to Christy Edwards so that Dr. Carnes' office has time to respond to our request by COB Monday.

2

ATTACHMENT 1

Bonneville Power Administration

In implementing the new borrowing authority, Bonneville will encourage private and joint financing of transmission line expansions and additions, it will obtain an approved five-year investment plan supported by the regional Infrastructure Technical Review Committee or its successor in the region, funds only will be used for currently authorized purposes, proposed uses will be reviewed annually, and projects must be based on the most cost effective option for achieving the objective.

Gale Kabat
Sent by: Gale Kabat

To: <William_D._Palmer@omb.eop.gov>@internet@HQMMAIL@HQDOE

01/04/02 05:30 PM

cc:
Subject: Re: BPA borrowing authority



Bill -

Were you going to email or fax the new borrowing authority galley language for BPA? I haven't received either.

FYI - Falcon & Amistad doesn't need a code 9 for full funded retirement as it rounds to less than \$1M.

Gale

<William_D._Palmer@omb.eop.gov>



<William_D._Palmer@omb.eop.gov>

To: gale.kabat@hq.doe.gov@internet@HQMMAIL

01/04/02 04:34 PM

cc:
Subject: BPA borrowing authority

Attached are two sheet that address BPA's new borrowing authority. Attachment 1 is a summary statement that OMB wants to place in the BPA section of the budget appendix that describes BPA's FY 2003 programs. Attachment 2 is an elaboration of the summary and provides the conditions for BPA's use of the new authority. As I understand it, this information was provided to DOE/BPA at the time of appeals. We are asking for comments by Monday COB on the section that will appear in the appendix.

Would you please make certain that the appropriate people in the budget office receive a copy of this and that it is also delivered to Christy Edwards so that

Dr. Carnes' office has time to respond to our request by COB Monday.

5 of 5

TOTAL P.04

ATTACHMENT 2

- Bonneville Power Administration (BPA) -- New Borrowing Authority

Increase BPA's borrowing authority by \$700 million. Bonneville needs to meet the following criteria for use of the additional amount:

- BPA will encourage private or joint-financing of all of its future transmission system upgrades and other investments, and will report to DOE on its evaluation of opportunities for private or joint-financing of the costs of such investments before using its borrowing authority for any such projects.
- The Office of Management and Budget must approve a five-year investment plan submitted by BPA through the Department of Energy (DOE), which covers the period over which borrowing is proposed to occur. The amount of borrowing for specific projects and the timing of funding those projects are subject to review as part of the process of approving the investment plan.
- The use of borrowed funds is subject to OMB review and approval as part of the development of each President's budget. DOE's annual budget submission will include a detailed justification of BPA's proposed investments for the budget year and future years.
- Use of borrowing will be limited to currently authorized purposes.
- The proposal must be endorsed by the Infrastructure Technical Review Committee or its successor within the northwest Regional Transmission Organization.
- The project must be the most cost effective option for achieving the objective.



THE DIRECTOR

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

12
RECEIVED BY DEPT
DIRECTOR'S
LOG # 01-0392
DATE: 7-24-01

INFO ONLY

JUL 12 2001

The Honorable Robert C. Byrd
Chairman
Committee on Appropriations
United States Senate
Washington, D.C. 20510

INFO ONLY: A-7, D-7, KN/Wash, KR-7,
KR-7C, L-7, P-6, PG-5, PGF-6, T/Ditt2, C-4
OF-2

Dear Mr. Chairman:

The purpose of this letter is to provide the Administration's views on the Energy and Water Development Appropriations Bill, FY 2002, as passed by the House.

The Administration appreciates the House's efforts to fund agencies and programs at the President's request, as detailed below. The Administration is committed to working with the Congress to enact all 13 appropriations bills in a timely manner and within the framework of the budget resolution. The President believes that this level of funding will moderate the recent rapid growth in spending while funding important national priorities. In developing the FY 2002 Budget, he sought to make reductions in one-time spending, unjustified or duplicative programs, and programs that have completed their mission. The Administration urges the Congress to support the President's overall approach to the FY 2002 Budget.

While the Administration supports this bill, we would like to take this opportunity to share some concerns with the House version of the bill, as noted below. We look forward to working with the Senate to resolve these concerns as the bill moves forward.

Department of Energy

House action on both the Energy/Water and Interior appropriations bills is consistent with and largely supportive of the President's National Energy Policy. On May 17th, with the release of the President's National Energy Policy, the President directed the Department of Energy (DOE) to undertake a review of existing energy efficiency and alternative and renewable energy research and development (R&D) programs to ensure future program budget allocations are performance-based and modeled as public-private partnerships. Based on the Secretary of Energy's preliminary review, the House's actions in both bills to include an additional \$285 million for energy efficiency and renewable energy R&D may be supportive of the President's objectives. The Administration looks forward to working with Congress through conference to ensure the allocation of resources to those programs that most effectively meet performance-based criteria. We will also work with Congress to fund the most efficient program alternatives by reducing lower priority program resources. In particular, the Administration believes it is necessary to leverage applied R&D funds to a greater extent by increasing the industry cost share. This would be particularly useful in some DOE programs, especially as R&D projects move closer to commercialization. This principle was outlined in the February Blueprint and the President's budget submission.

The Administration is concerned about the \$699 million increase provided by the House for the Environmental Management program. DOE has initiated a performance review of Environmental Management activities, and we believe it is prudent to review the findings of this study to ensure effective program execution before restoring funding that the budget proposed to reduce. The House's recommendation also includes a \$176 million reduction from the request for Weapons Activities in the National Nuclear Security Administration. The decreased funding could adversely impact the maintenance and refurbishment of the Nation's nuclear weapons stockpile. The Administration believes this funding should be included in the Senate bill.

In addition, the Administration welcomes Congress' input and assistance on safety and health issues at DOE facilities. However, the Administration believes that section 308 of the House-passed bill, which calls for external regulation of the Department's non-defense science laboratories, is premature and would like to work with Congress to determine an appropriate means of ensuring the safety and health of workers at these facilities.

We understand that the Senate Subcommittee may consider a provision to increase the Bonneville Power Administration's (BPA's) borrowing ceiling by \$2 billion to finance transmission, power, and conservation expansions. We believe this increase is unnecessary at this time. Under BPA's proposed spending plans, it would be able to finance its capital investments at least through the end of FY 2003 without the need for a ceiling increase. In addition, pursuant to recommendations in the National Energy Policy Report, the Secretary of Energy is analyzing transmission system bottlenecks across the country and ways to remove them. It is in this context that the Administration is reviewing BPA's capital and financial requirements. We will continue to work with the Congress to ensure that BPA has adequate resources to conduct an effective capital investment program.

Army Corps of Engineers

The Administration appreciates the House's efforts to address Administration funding priorities for the Army Corps of Engineers Civil Works program. However, the Administration is concerned about the House's increase of \$568 million over the request for Corps programs. We can have a strong water resources program at the funding level proposed in the budget by establishing priorities among projects. The Administration is particularly concerned that the House bill contains approximately \$360 million for about 350 specifically identified projects and activities that were not included in the President's budget (over \$110 million more than were included for such earmarks in last year's House bill). Given the large backlog of funding needed to complete construction projects already underway (\$21 billion), the President's budget focused on completing ongoing projects rather than starting construction of new projects that would add to this backlog and increase delays in completing ongoing projects. Therefore, we urge the Senate to limit the number of earmarked projects and to focus funding on those projects that address the Corps' principal mission areas.

We are disappointed that the House bill has included a provision (section 104), that would preclude the Corps from carrying out in FY 2002 the Administration's proposal to increase local cost-sharing for the renourishment phase of ongoing shore protection projects. The Administration's cost-sharing proposal would reduce the Federal cost of the projects in the House bill by nearly \$30 million this year, with at least this much savings in each future year.

This cost-sharing proposal would help ensure that the Federal Government's long-term renourishment obligations do not crowd out other important funding needs. We urge the Senate to adopt the Administration's proposal.

The Administration also objects to the inclusion in the House-passed bill of a legislative provision (section 504) that would prohibit the Army Corps of Engineers from issuing permits for drilling to extract or explore for oil or gas beneath the Great Lakes and certain other bodies of water.

Bureau of Reclamation

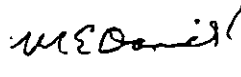
We are disappointed that the House did not include the \$20 million requested for the California Bay-Delta Restoration Program. Without this funding, Federal and State efforts to restore this ecosystem, protect the drinking water for 22 million Californians, and enhance water supply and reliability for over seven million acres of highly productive farmland would be delayed. The request would fund authorized management, planning, and water acquisition activities that are consistent with the Record of Decision, signed in August 2000 that lays out the plan for a long-term Bay-Delta program. We urge the Senate to include the requested funds in order to demonstrate continued Federal support for this program while consideration of the long-term authorization legislation proceeds. We also note that the Senate could fund the Bay-Delta activities from the \$25 million earmarked by the House for projects and programs not included in the President's budget.

Infringement on Executive Authority

The Administration objects to the provision in Section 303 in the House-passed bill that would require Committee approval before Executive Branch execution. The Administration will interpret this provision to require only notification of Congress, since any other interpretation would contradict the Supreme Court ruling in *INS v. Chadha*.

We look forward to working with the Senate to address our mutual concerns.

Sincerely,



Mitchell E. Daniels, Jr.
Director

Identical Letter Sent to The Honorable Harry M. Reid,
The Honorable Robert C. Byrd, The Honorable Pete V. Domenici
and The Honorable Ted Stevens

memorandum

DATE: November 21, 2001

REPLY TO
ATTN OF: DFF-2

SUBJECT: Bonneville Power Administration Follow-up Questions

to: Dr. Bruce M. Carnes, Chief Financial Officer – U.S. Department of Energy

Here is our response to the questions we discussed earlier in the week with Frank:

1. What would we not do if we don't get the increase in borrowing authority?


Our immediate reaction if we did not get borrowing authority would be to go back to our old plan, which was the FY02 budget submittal. This would mean that our starting point would be that we would not go forward with any of the infrastructure projects that we have been discussing with you and OMB. But the way our capital budgeting process works is that it regularly reevaluates projects and reestablishes priorities. Whether we get borrowing authority or not we will be reevaluating our priorities in the coming months. The line for which projects gets funded would be drawn in a different place if we don't get borrowing authority. In order to try to provide you some information beyond just a recapitulation of our FY2002 budget we have attempted a mini-capital budgeting review and identified high, medium and low priorities among all the high priority projects included in the current FY2002 projects and the infrastructure investment projects.

2. How do BPA's activities for funding transmission projects compare against the private sector?

BPA voluntarily complies with the FERC open access rules that apply to all investor-owned utilities. These rules provide general guidance about cost responsibility. BPA interprets them in a manner which assures full cost recovery for projects that it is funding. FERC has initiated a proceeding to provide greater clarity about cost responsibility for generation integration. When FERC issues its rule on this issue, Bonneville intends to voluntarily comply as we do currently with today's open access rules. This should assure that BPA's policies are consistent with the policies of investor-owned utilities around the country.

3. What commitments is BPA willing to make regarding developing non-Federal financing?

Following the meeting with Mitch Daniels in August we have had informal discussions with interested parties about their willingness to provide non-Federal financing. We have uncovered some interest and are aggressively pursuing these opportunities. We have also begun developing a posting that we would make on our transmission real-time information system to solicit interest in financing any of our infrastructure projects. We expect this to be posted within the next two months.


Stephen J. Wright
Acting Administrator and
Chief Executive Officer

Attachments (3)

cc:
R. Aiken S-1

bcc:

Adm. Chron File – A

J. Curtis – DF-2

J. Stier – KN/WASH

M. Weedall PN-1

Official File – DFF (BU-11-18)

ECC – D-7 (01-0621)

M. Hawken – DFF-2

R. Roach – L-7

M. Maher – T-DITT2

S. Hickok – D-7

S. Sanford – DFF-2

P. Norman – P-6

SSanford:dle:5333:11/21/2001 (w:/Kg/Infrastructure/Carnes/2001-11-21 Memo-Wright to Carnes.doc)

8

United States Senate
WASHINGTON, DC 20510

July 12, 2001

The Honorable Mitch Daniels
Director
Office of Management and Budget
Old Executive Office Building
Washington, D.C. 20503

Dear Director Daniels:

We are writing with regard to two issues of vital importance to our region: the Bonneville Power Administration's access to credits under section 4(h)(10)(C) of the Northwest Power Act and BPA's need for an increase in its authority to sell bonds to the U.S. Treasury.

Under the Northwest Power Act, BPA is required to make expenditures to protect, mitigate, and enhance fish and wildlife affected by Federal hydro projects. BPA is required to do so consistent with the fish and wildlife program of the Northwest Power Planning Council (Council). The Act also requires BPA to take as a credit against its debt repayments to Treasury the non-power project purposes' share of BPA's fish and wildlife costs. In effect, section 4(h)(10)(C) of the Act directs BPA – acting on behalf of its ratepayers – to appropriately allocate to the U.S. Treasury its share of the mitigation costs for these Federal projects.

Due to the persistent drought in the Northwest and the extraordinarily high wholesale power market prices in the West, fish and wildlife mitigation costs in the Columbia River basin have increased dramatically this year. Therefore, the 4(h)(10)(C) credits also have increased significantly. BPA's access to the credits is currently implemented by reducing annual cash transfers to Treasury. The credits do not reduce BPA's payment obligation; rather the credits are treated as a source of funds that satisfies the payment obligation. It is essential that the Administration support Bonneville's access to credits for this year's salmon recovery costs, as well as credits that are supposed to be made available under adverse water conditions through the Fish Cost Contingency Fund established in 1996.

The second issue of importance, BPA's need for an increase in its authority to sell bonds to the U.S. Treasury, is driven by system improvements BPA must make to maintain the reliability of the Northwest's electricity supply and relieve crippling transmission system congestion. In addition, Bonneville is being called upon to integrate a substantial amount of new generation now being planned by private developers in the region. Finally, BPA has identified investments it can make using its self-financing authority to increase generation from existing facilities within the Federal Columbia River Power System, and to step up regional energy conservation efforts. To assure that BPA continues to have sufficient financial resources necessary to make needed electric infrastructure

investments in a timely manner, BPA will need up to \$2 billion in additional borrowing authority above the current \$3.75 billion limit.

We want to impress upon you the importance of these two issues. The Northwest's economy and our natural environment depend on BPA's ability to secure its access to the credits and the additional borrowing authority.

Sincerely,



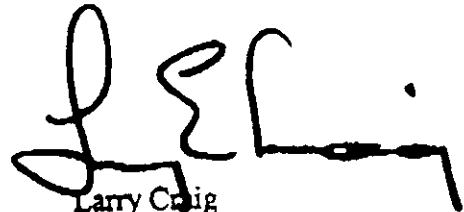
Gordon H. Smith
United States Senate



Maria Cantwell
United States Senate



Ron Wyden
United States Senate



Larry Craig
United States Senate



Patty Murray
United States Senate



Max Baucus
United States Senate



Mike Crapo
United States Senate



Conrad Burns
United States Senate

United States Senate

WASHINGTON, DC 20510

August 2, 2001

Steve Wright
Acting Administrator
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon, 97208-3621

ASSIGN: KR-7C

cc: A-7, D-7, KN/Wash, L-7, P-6,
T/Ditt2, DF-2 PAT/BART

Dear Steve:

As you know, we are working with the other Members of the Northwest delegation in an effort to secure additional borrowing authority for the Bonneville Power Administration. The Senate-passed version of the Fiscal Year 2002 Energy and Water Development Appropriations bill contains a \$ 2 billion increase in borrowing authority, but subjects it to the annual appropriations process and restricts it to transmission system improvements. This is unacceptable to the Northwest.

At the time the bill was being considered by the Senate, the Office of Management and Budget sent to the Hill a Statement of Administration Policy that expressed opposition to increasing the borrowing authority at this time, but did indicate a willingness to examine this issue further.

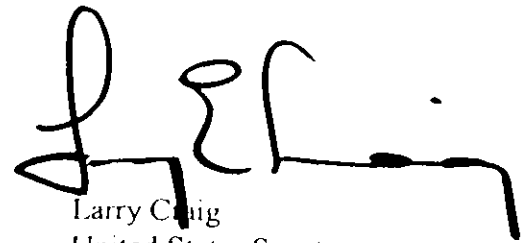
We have just met with OMB Director Daniels, and he expressed to us his concerns about the lack of specificity concerning how BPA intends to use this additional bonding authority. In our efforts to be responsive to him, and to ensure that the entire Northwest delegation is working with the same information, we ask that you meet with Director Daniels immediately and provide him detailed information about: the amount remaining available under BPA's current borrowing authority, how you intend to use it, and how long you expect it to last; the projected infrastructure needs for both power and transmission; and the near-term priorities for transmission construction.

We ask also that you provide us with that information as soon as possible to enable us to work with the rest of the Northwest delegation and the Administration toward a successful resolution of this issue, in a manner acceptable to the region. We look forward to receiving this information from you in an expeditious manner.

Sincerely,



Gordon H. Smith
United States Senate



Larry Craig
United States Senate



Department of Energy

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

EXECUTIVE OFFICE

DRAFT

In reply refer to: A-7

MEMORANDUM FOR THE DEPUTY SECRETARY

FROM: Stephen J. Wright
Acting Administrator and CEO

SUBJECT: Increased Borrowing Authority

Per our discussion following our meeting with the Secretary yesterday, it is my understanding that we want to advance the discussions and understanding of an increase in borrowing authority for infrastructure investments. As I understand it the Secretary and you support infrastructure investment, want some third-party validation of our needs, believe there is a need for an OMB strategy, and want to keep the door open for addressing this problem this year. As you requested, I have put down my ideas on how we might proceed. I am proposing that we at BPA:

1. Define a package of transmission, hydrosystem, and conservation measures that go beyond the President's budget. Budgets will be prepared for 5 years with a trend analysis to define a second 5 years. (Curtis/Hawken Team) *End of next week*
- ✓ 2. Provide you with a defined process for how we will make capital allocation decisions, employing hurdle rates and methods for accounting for non-financial objectives such as reliability, safety and environmental quality. (Curtis/Hawken Team) *sent 4/2/83*
3. Work within DOE to assure we have a common position and are working together toward a common goal. (Wright/Stier/ Seifert)
4. Define and conduct a public process for capital investments to create greater consensus around the appropriate size of the increase in borrowing authority. (Curtis/Hawken Team)
5. Parallel with the public process above, develop and test with the DoE CFO's Office a logic for the need for and level of borrowing authority increase and a strategy for securing Administration understanding and support for an increase in borrowing authority. (Curtis/Seifert)
6. Work with CBO to understand the scoring implications of an increase in borrowing authority. (Seifert/Barringer/Baskerville)
7. Define and implement strategies that keep the door open for addressing this issue in the current Congressional session. (Wright/Stier)

Sandford, Sue - DFF-2

From: Hawken, Mary - DFF-2
Sent: Friday, June 21, 2002 5:51 PM
To: Sandford, Sue - DFF-2
Subject: FW: Summary for Infrastructure Package



Summary of
Attachments.doc

Sue, this is the first of six e-mails that respond to the FOIA request.

- - Mary

-----Original Message-----

From: Hawken, Mary - DFF-2
Sent: Thursday, November 15, 2001 11:32 AM
To: 'Gale Kabat'
Cc: Sandford, Sue - DFF-2; Stier, Jeffrey K - KN-DC; Baskerville, Sonya
L - LC-7; Jones, Sheron - KN-DC; Seifert, Roger - KN-DC;
'Adrianne.Moss@hq.doe.gov'
Subject: Summary for Infrastructure Package

Gale,

Per our discussion, below is a summary of attachments that are tied to the specific OMB questions from Dr. Carnes memo to Steve Wright. Also, we have highlighted new material or materials that were previously sent to OMB.

Please note that we still need to send you the specific references to the fiber questions and that will be coming to you, shortly.

- - Mary

Summary of Attachments in response to DOE memo on OMB Request for Information (Nov. 5, 2001):

The underlying data for the "Borrowing Authority to Support Infrastructure Investments" graph is found in Attachments 2, 3 and 4. Included as part of the FY 2003 OMB budget data are all the high priority infrastructure capital projects that BPA feels are critical to assuring the reliability of the power system.

Information requested that is specific to what projects BPA expects to fund with its current authority and which projects it expects to fund with additional authority is discussed in Attachment 1. If BPA does not receive additional borrowing authority, it would need to review all its proposed projects through implementation of its Capital Budgeting Process. This process is included in Attachment 1.

Project detail and justification of need for specific projects is found in Attachments 4, 5, 6, 7 and 8. Much of this information has already been submitted to OMB. Specifically, Attachment 8 is a lengthy document that contains some materials previously submitted separately. In addition, much of the transmission project information can be found on BPA's external web site at http://www.transmission.bpa.gov/tblib/newsevents/docs/capitalprogram3_16_00.pdf

A list of previously submitted materials to OMB as of July 2001 is found in Attachment 9.

A general report on fiber is found in Attachment 10 and is also available on BPA's web site at http://www.transmission.bpa.gov/tblib/newsevents/docs/final_docs/DM_Apndx21.pdf. A discussion of BPA's current fiber activities is found in Attachment 11. **To be added: references to responses to specific questions.** Please note Footnote 1 of Attachment 11 for a brief overview of how BPA finances its various capital projects.

Attachment 1: Overview of Bonneville practices regarding borrowing authority and Bonneville's Capital Budgeting Process

Attachment 2: Budget data supporting Bonneville's request for increased borrowing authority

- Summary Capital Investment Data for FYs 2001-2011
- FY 2002 Congressional Budget Capital Investments
- FY 2003 OMB Budget Capital Investments

Attachment 3: FY2003 OMB budget data: Transmission Project Detail

Attachment 4: FY2003 OMB budget data: Hydro and Conservation Project Detail

Attachment 5: Infrastructure Project Detail: Transmission (1)

Attachment 6: Infrastructure Project Detail: Transmission (2)

Attachment 7: Infrastructure Benefits Summary

- Attachment 8: A Proposal for the Northwest's Long-Term Power Solution
Investments in Infrastructure, July 2001: including transmission,
power and conservation infrastructure data and business case
- Attachment 9: DOE staff memo on material submitted regarding Bonneville
Capital and Financing Requirements
- Attachment 10: Bonneville Fiber-Optic Cable Plan, March 2000
- Attachment 11: Status Paper on Bonneville's Fiber-Optic Cable Plan, November
2001



The Deputy Secretary of Energy

1000 Independence Avenue, S.W.

Washington, D.C. 20585

(202) 586-5500 • FAX (202) 586-0146

August 7, 2001

The Honorable Gary Locke
Governor of Washington
Olympia, WA 98504-0002

Dear Governor Locke:

Thank you for your July 6, 2001, letter expressing support for an increase in Bonneville Power Administration's (Bonneville) borrowing authority from the U.S. Treasury.

Bonneville and the Administration are taking steps to ensure that we do not face the shortages of generation supply and transmission infrastructures that led to the West Coast energy crisis. We recognize that Bonneville's transmission system must be expanded. In response to the President's National Energy Plan, Bonneville is looking at a program of transmission and generation improvements, as well as conservation initiatives. Several Pacific Northwest stakeholders have written to me to say that these improvements are urgently needed and are consistent with Bonneville's mission.

I have asked the Administrator to design a process to review and prioritize major new infrastructure investments. Bonneville has designed such a process for transmission investments in collaboration with the stakeholders and plans to initiate the process. This process will provide investor-owned utility and public agency customers a role in evaluating proposed major infrastructure additions for their cost, benefits, and their contribution to reliability, as well as schedules for project completions. Bonneville will engage regional stakeholders in discussions to clarify and refine forecasts of capital needs for generation improvements and conservation. We will closely monitor these processes.

If you have any further questions, please contact me or have your staff contact Mr. Dan R. Brouillette, Assistant Secretary, Office of Congressional and Intergovernmental Affairs, at (202) 586-5450.

Sincerely,

Francis S. Blake



Printed with soy ink on recycled paper

United States Senate
WASHINGTON, DC 20510

July 12, 2001

RECEIVED BY BPA ADMINISTRATOR'S OFC-LOG #: 01-0376
RECEIPT DATE: 7-16-01
DUE DATE: INFO ONLY

The Honorable Mitch Daniels
Director
Office of Management and Budget
Old Executive Office Building
Washington, D.C. 20503

INFO ONLY: KR-7C
cc: A-7, D-7, KN/Wash, L-7, P-6,
KE-4, T/Ditt2, DF-2

Dear Director Daniels:

We are writing with regard to two issues of vital importance to our region: the Bonneville Power Administration's access to credits under section 4(h)(10)(C) of the Northwest Power Act and BPA's need for an increase in its authority to sell bonds to the U.S. Treasury.

Under the Northwest Power Act, BPA is required to make expenditures to protect, mitigate, and enhance fish and wildlife affected by Federal hydro projects. BPA is required to do so consistent with the fish and wildlife program of the Northwest Power Planning Council (Council). The Act also requires BPA to take as a credit against its debt repayments to Treasury the non-power project purposes' share of BPA's fish and wildlife costs. In effect, section 4(h)(10)(C) of the Act directs BPA - acting on behalf of its ratepayers - to appropriately allocate to the U.S. Treasury its share of the mitigation costs for these Federal projects.

Due to the persistent drought in the Northwest and the extraordinarily high wholesale power market prices in the West, fish and wildlife mitigation costs in the Columbia River basin have increased dramatically this year. Therefore, the 4(h)(10)(C) credits also have increased significantly. BPA's access to the credits is currently implemented by reducing annual cash transfers to Treasury. The credits do not reduce BPA's payment obligation; rather the credits are treated as a source of funds that satisfies the payment obligation. It is essential that the Administration support Bonneville's access to credits for this year's salmon recovery costs, as well as credits that are supposed to be made available under adverse water conditions through the Fish Cost Contingency Fund established in 1996.

The second issue of importance, BPA's need for an increase in its authority to sell bonds to the U.S. Treasury, is driven by system improvements BPA must make to maintain the reliability of the Northwest's electricity supply and relieve crippling transmission system congestion. In addition, Bonneville is being called upon to integrate a substantial amount of new generation now being planned by private developers in the region. Finally, BPA has identified investments it can make using its self-financing authority to increase generation from existing facilities within the Federal Columbia River Power System, and to step up regional energy conservation efforts. To assure that BPA continues to have sufficient financial resources necessary to make needed electric infrastructure

JUL 16 2001 10:10AM

NO. 223

P. 3/3

investments in a timely manner, BPA will need up to \$2 billion in additional borrowing authority above the current \$3.75 billion limit.

We want to impress upon you the importance of these two issues. The Northwest's economy and our natural environment depend on BPA's ability to secure its access to the credits and the additional borrowing authority.

Sincerely,



Gordon H. Smith
United States Senate



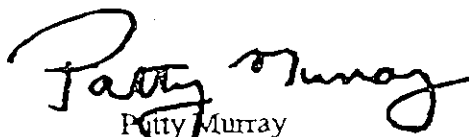
Maria Cantwell
United States Senate



Ron Wyden
United States Senate



Larry Craig
United States Senate



Patty Murray
United States Senate



Max Baucus
United States Senate



Mike Crapo
United States Senate



Conrad Burns
United States Senate



Department of Energy

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

EXECUTIVE OFFICE

December 11, 2001

In reply refer to: DFF-2

The Honorable Larry Craig
United States Senate
Washington, DC 20510

Dear Senator Craig:

In response to your staff's request, I want to assure you that the Bonneville Power Administration (Bonneville) has responded to the list of questions forwarded to us by the Office of Management and Budget (OMB) in support of our request for an increase in our statutory borrowing authority. Specifically, we recently sent, through the Department of Energy's (DOE's) Chief Financial Officer, a set of detailed tables showing which new projects would be funded with Bonneville's existing borrowing authority and which would be funded with new borrowing authority. The tables show year-by-year spending levels and project completion dates. It is important to note that Bonneville will continue to review and revise its capital construction plans based on changing conditions. As a result, project priorities can be expected to change over time from those represented in the material we provided.

However, I can assure you that Bonneville will continue to provide Congress, DOE and OMB the opportunity to review its capital construction program as part of the annual budget process. In addition, we anticipate that technical review teams composed of representatives from many of the Northwest's investor-owned and public utilities will conduct annual reviews of Bonneville's transmission construction plans. As you know, such a team recently conducted an initial review of our five-year transmission construction program and fully endorsed our proposed list of projects and priorities.

As circumstances in the region change, our estimate of our capital construction needs changes, as well. The annual budget review process will allow Congress and the Executive Branch the opportunity to review and influence our program on an ongoing basis.

Sincerely,

A handwritten signature in black ink, reading "Stephen J. Wright", is positioned above the typed name.

Stephen J. Wright
Acting Administrator and
Chief Executive Officer



Department of Energy

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

EXECUTIVE OFFICE

December 11, 2001

In reply refer to: DFF-2

The Honorable Gordon Smith
United States Senator
Washington, DC 20510

Dear Senator Smith:

In response to your staff's request, I want to assure you that the Bonneville Power Administration (Bonneville) has responded to the list of questions forwarded to us by the Office of Management and Budget (OMB) in support of our request for an increase in our statutory borrowing authority. Specifically, we recently sent, through the Department of Energy's (DOE's) Chief Financial Officer, a set of detailed tables showing which new projects would be funded with Bonneville's existing borrowing authority and which would be funded with new borrowing authority. The tables show year-by-year spending levels and project completion dates. It is important to note that Bonneville will continue to review and revise its capital construction plans based on changing conditions. As a result, project priorities can be expected to change over time from those represented in the material we provided.

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Sincerely,

A handwritten signature in cursive script, reading "Stephen J. Wright", is positioned above the typed name.

Stephen J. Wright
Acting Administrator and
Chief Executive Officer

Congress of the United States

Washington, DC 20515

April 30, 2002

Joe Thiessen, Executive Director
Taxpayers for Common Sense
651 Pennsylvania Ave, SE
Washington, DC 20003

Brent Blackwelder, President
Friends of the Earth
1025 Vermont Avenue, NW
Washington D.C. 20005

Dear Mr. Thiessen and Mr. Blackwelder:

We are writing to express our disappointment with the section of your recent *Green Scissors 2002* report that targets the Bonneville Power Administration (BPA). Your report contains some serious misrepresentations and outright falsehoods about BPA and its capital investment plans. Unfortunately, your report repeats the same analytical errors that the Northeast-Midwest Institute has been making for years. We would like to set the record straight.

BPA is a self-financed federal power marketing administration in the Pacific Northwest, which supplies about 45 percent of the electricity consumed in our region. And, significantly, BPA owns and operates about 75 percent of the region's high voltage transmission.

BPA has not built any major transmission facilities since 1987. Its transmission system is suffering from crippling congestion that is increasingly threatening basic electric reliability (i.e. the ability to keep the lights on) in the Northwest and hindering the proper functioning of West Coast electricity markets. In order to help finance needed investments in the federal transmission system, the Administration and BPA are seeking a \$700 million increase in BPA's existing statutory borrowing authority. BPA has been directed by the Administration to pursue joint public-private projects.

The *Green Scissors* report claims that "BPA imposes a significant financial burden on U.S. taxpayers." That is not even remotely the case. BPA – and its Northwest electric ratepayers – fully repay past federal investments at prevailing market interest rates. You might be interested to know that the original federal appropriations for the power producing portions of the Bonneville and Grand Coulee Dams have been fully repaid. It's a great deal for the U.S. taxpayer – Northwest ratepayers pay the mortgage, and when it's paid off, the landlord – the U.S. Treasury – keeps the title.

There are no federal "subsidies" to BPA and that fact is confirmed by the Federal Energy Regulatory Commission, which reviews Bonneville's rates to make sure they are set high

enough to fully cover BPA's costs and repay the federal investment in the Northwest's power system.

The *Green Scissors* report throws a lot of rhetorical dust in the air, claiming, for instance, that "The existing fish programs funded by BPA are not helping to recover imperiled salmon."


We fail to see what the success or failure of BPA's \$500 million a year salmon recovery program has to do with the merits of an increase in BPA's Treasury borrowing authority. BPA will primarily use additional Treasury borrowing authority for investments in its transmission system, though investments in energy conservation are also envisioned. Those investments, of course, would be fully repaid with interest by BPA and its ratepayers and would help the environment by reducing energy consumption, which we assume your organizations would support.

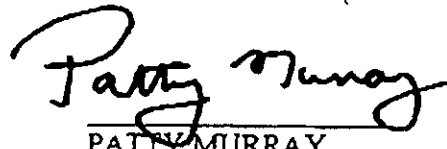
However, contrary to the overblown claims made in the *Green Scissors* report, we would note that salmon recovery efforts in the Columbia River basin are showing significant signs of success. We have recently witnessed some of the largest runs of returning adult Chinook salmon that have been seen in the Columbia River since Bonneville Dam counts began in 1938. Thanks to BPA's investments in downstream passage improvements at the federal projects, the survival of outmigrating juvenile salmon is as good as it was in the 1960s, before three of the four federal dams on the Lower Snake River were built. Last year's drought – the second worst since records began being kept nearly 75 years ago – set back our efforts. But improvements purchased by billions of Northwest ratepayer dollars successfully minimized the harmful effects of one of the worst the droughts of the century.

The capital investments BPA will make in transmission and energy conservation in the years ahead will improve the reliability of the Northwest grid and provide significant environmental benefits. The *Green Scissors* report recommends that BPA "conduct a cost-effective capital investment program, financed by the beneficiaries of the system." That's exactly what BPA is proposing. Every penny BPA borrows is repaid with interest by Northwest ratepayers. BPA's repayment record is exemplary; its credit rating with rating agencies like Standard and Poor's is superb.

We hope your position on this issue will be based on the facts. Please feel free to contact us or members of our staff if you have any questions.

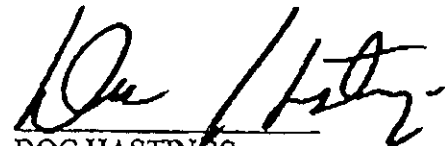
Sincerely,

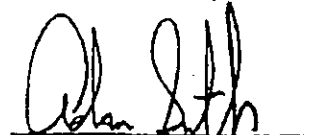

PETER DeFAZIO
Member of Congress

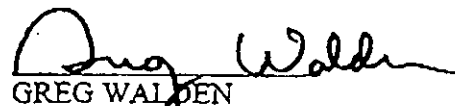

PATTY MURRAY
United States Senator


Letter re: BPA and *Green Scissors* report
April 30, 2002


EARL BLUMENAUER
Member of Congress


DOC HASTINGS
Member of Congress


ADAM SMITH
Member of Congress


GREG WALDEN
Member of Congress


RON WYDEN
United States Senator


MARIA CANTWELL
United States Senator


GEORGE NETHERCUTT
Member of Congress


BRIAN BAIRD
Member of Congress

August 30, 2001

Addressees

Subject: Infrastructure Technical Review Committee Report

Portions of the Northwest transmission system are approaching gridlock. An adequate and affordable electric supply is not possible without sufficient transmission capacity. An unreliable system puts public health, safety and the economy at risk.

As the operator of three-quarters of the bulk transmission in the Northwest, the Bonneville Power Administration (BPA) developed a transmission infrastructure proposal that builds upon BPA's previous transmission expansion plans. Undertaking a capital program of this magnitude will require an increase in BPA's borrowing authority. A diverse group of Northwest electric power interests, in an August 8, 2001 letter to Vice President Cheney, strongly endorsed increased borrowing authority in order to ensure that sufficient financial resources are available to accomplish transmission expansion needed to ensure an adequate and affordable electricity system for the Northwest.

To ensure that BPA's proposal designs and prioritizes improvement projects in a manner that will provide the most cost-effective, reliable service for the region's consumers, a technical and economic review committee was formed. The committee drew on individuals who are also members of the Northwest Power Pool (NWPP) Transmission Planning Committee (TPC), Operating Committee (OC) and the Northwest Regional Transmission Association ("NRTA") Planning Committee ("PC"). The committee was asked to report its recommendations by August 30, 2001 to enable BPA to install necessary system facilities as soon as possible. A critical first step is securing additional borrowing authority for BPA.

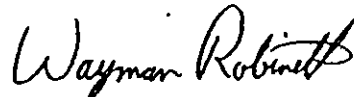
Attached is a report on the transmission infrastructure proposal that contains the conclusions and recommendations of the review committee. This is the first annual report on BPA's major transmission investments.



Ken Morris
PacifiCorp



John Martinsen
Snohomish PUD



Wayman Robinett
Puget Sound Energy



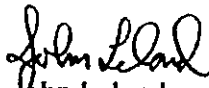
Hardev Jui
Seattle City Light



Scott Waples
AvistaCorp



Ronald Schellberg
Idaho Power Company



John Leland
Montana Power Company



Jim Eden
PGE Company

cc
Infrastructure Technical Review Committee


Avista Corp.
1411 East Mission MSC-12 PO Box 3727
Spokane, Washington 99220-3727
Telephone 509-489-0500

Gary G. Ely
Chairman of the Board,
President and Chief Executive Officer

RECEIVED BY BPA ADMINISTRATOR'S OFC-LOG #: 01.0375
RECEIPT DATE: 7.16.01
DUE DATE: INFO ONLY



July 11, 2001

INFO ONLY:  D-7, KN/Wash, L-7,
P-6, T/Ditt2, DF-2

Chairman Robert C. Byrd
Senate Committee on Appropriations
311 Senate Hart Office Building
Washington, DC 20510

Dear Chairman Byrd:

On behalf of Avista Corporation, I am writing to follow-up on the July 11 letter you received from Jim Litchfield regarding the strong support of the Northwest investor-owned utilities for increasing the borrowing authority of the Bonneville Power Administration (BPA) as part of the Energy and Water Appropriations bill.

Avista supports increasing BPA's borrowing authority because of the critical need to improve the BPA transmission system. The BPA transmission system is the "backbone" of the region's transmission grid, but it has not been significantly expanded for at least 10 years. Consequently, BPA does not have sufficient transmission capacity to accommodate power from all of the current and pending generation facilities that are needed to satisfy the energy needs of the Northwest. Unless a substantial investment is made in upgrading the BPA transmission system in the very near future, we run a substantial risk of serious reliability problems in the region.


I am particularly pleased that BPA has agreed to form a technical and economical review committee with its transmission customers. We look forward to working with BPA to assure that its transmission improvements are prioritized so as to provide the most cost-effective and reliable service for the region.

If you or your staff have any questions, please feel free to call me.

Sincerely,

A handwritten signature in dark ink, appearing to be "G. Ely", written in a cursive style.

Gary Ely

cc: Senator Ted Stevens
Senator Jack Reed
Senator Pete Domenici
Senator Patty Murray
Senator Conrad Burns
Rep. Sonny Callahan
Rep. Peter Visclosky
Secretary Spencer Abraham
 Stephen Wright - Acting Administrator, Bonneville Power Administration



PUBLIC SERVICE COMMISSION

1701 Prospect Avenue - PO Box 202601
 Helena, Montana 59620-2601
 Telephone: (406) 444-6166
 FAX #: (406) 444-7618
 E-MAIL: gfeland@state.mt.us

Gary Feland, Commissioner
 District 1

July 12, 2001

Secretary Spencer Abraham
 Room 7B22
 1000 Independence Avenue
 Washington, D.C. 20585

Dear Secretary Abraham:

Post-It® Fax Note	7671	Date	16 July 01	# of Pages	1
To	Karent Hunt	From	Gail Kuntz		
Co./Dept.	Steve Wright	Co.	BPA-MSGX		
Phone #		Phone #	406 449 5790		
Fax #	503-230-4018	Fax #			

On behalf of the Montana Public Service Commission, I am writing to express support for the Bonneville Power Administration's (BPA) request for an increase in its borrowing authority from the U.S. Treasury. BPA estimates its need for the development of a package of infrastructure improvements at approximately two (2) billion dollars in additional borrowing authority.

Inadequate electrical generation and transmission infrastructure has been one of the fundamental causes of the electricity price crisis we are experiencing in the west. If new generation and transmission are to be built anytime soon, BPA will necessarily play a vital role.

BPA must make significant capital investments in its high voltage transmission system in the Pacific Northwest to serve its load. New generation is being built, and significantly more is scheduled for construction. However, unless BPA can integrate this new production into its system it may not be built.

BPA must also support newly developing efficiency technologies as they become financially viable to encourage consumers to make critical conservation and demand side management investments. Investment in conservation helps supplant costly power purchases, and because it involves private interests, creates additional jobs in the private sector.

Some of the transmission infrastructure enhancement proposed by BPA will affect the wholesale electricity market in Montana. Therefore, the Commission's support for an increase in BPA's borrowing authority is conditioned on the opportunity of Montana to participate in the decision making process for the various projects that BPA proposes.

Thank you for your consideration.

Sincerely,

Gary Feland
 Chairman

Utility Consumer Complaints (800) 646-6150

"AN EQUAL EMPLOYMENT OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER"

RECEIVED BY BPA ADMINISTRATOR'S OFC-LOG #: 01-0381
RECEIPT DATE: 7.17.01
DUE DATE: INFO ONLY

INFO ONLY: Gail Kuntz-KR/MSGL
 cc: A-7, D-7, KN/Wash, KR-7, L-7, P-6,
 PG-5, KE-4, DF-2, T/Ditt2

Robert P. Gannon
Chairman of the Board,
CEO and President



The Montana Power Company

STC-LOG #:	01-0385
RECEIPT DATE:	7.20.01
DUE DATE:	
INFO ONLY	

July 12, 2001

**INFO ONLY: A-7, D-7, KN/Wash, L-7,
P-6, T/Ditt2, DF-2**

Chairman Robert C. Byrd
Senate Committee on Appropriations
311 Senate Hart Office Building
Washington, DC 20510

Dear Chairman Byrd:

I am writing to express Montana Power Company's support for increasing the borrowing authority of the Bonneville Power Administration (BPA) to facilitate the construction of additional electric transmission facilities. This funding is critically important to improve the capacity and reliability of BPA's transmission system for the benefit of consumers throughout the Pacific Northwest.

I am pleased that BPA has recently agreed to form a review committee with its transmission customers to assure that transmission improvements are prioritized so as to provide the most cost-effective and reliable service for the region. Montana Power will gladly participate in the important work to be undertaken by this review committee. It would be appropriate for language supporting the formation of this committee to be included in your Committee report.

Montana Power has been, and continues to be, concerned about BPA's program to install fiber optic cable far in excess of BPA's legitimate operational requirements. I encourage the Committee to carefully review any additional funding that BPA may request for this purpose.

If you or your staff have any questions about Montana Power's support for additional BPA borrowing authority, please contact Bill Pascoe, Montana Power's Vice President, Energy Supply at (406) 497-4212.

Sincerely,

CC: Senator Conrad Burns
Senator Max Baucus
Representative Dennis Rehberg
Governor Judy Martz
Senator Ted Stevens
Senator Pete Domenici
Senator Patty Murray
Senator Larry Craig
Representative Sonny Callahan
Representative Peter Visclosky
Secretary Spencer Abraham
Stephen Wright – Acting Administrator, BPA



July 11, 2001

Chairman Robert C. Byrd
Senate Committee on Appropriations
311 Senate Hart Office Building
Washington, DC 20510

Dear Chairman Byrd:

On behalf of Avista Corporation, Idaho Power Company, Montana Power Company, PacifiCorp, Portland General Electric, and Puget Sound Energy, Inc., I am writing to voice our strong support for increasing the borrowing authority of the Bonneville Power Administration (BPA) as part of the Energy and Water Appropriations bill that will be considered by your Committee tomorrow. We believe that this is a critical step toward improving the capacity and reliability of BPA's transmission system, for the benefit of consumers throughout the Pacific Northwest. We are pleased to inform you that BPA has recently agreed to form a technical review committee with its transmission customers to assure that transmission improvements are prioritized so as to provide the most cost-effective and reliable service for the region. We respectfully request that language in support of the formation of this committee be included in your Committee report.

If you or your staff have any questions, please feel free to call me.

RECEIVED BY BPA ADMINISTRATOR'S UFC-LOG #:01-0368
RECEIPT DATE: 7-12-01
DUE DATE: INFO ONLY

A, D, KN, DF, L, P, T

Sincerely,

James Litchfield
Consultant for the
Investor Owned Utilities
503-222-9480
lcg@europa.com

cc: Senator Ted Stevens
Senator Jack Reed
Senator Pete Domenici
Senator Patty Murray
Senator Conrad Burns
Rep. Sonny Callahan
Rep. Peter Visclosky
Secretary Spencer Abraham
Stephen Wright – Acting Administrator, Bonneville Power Administration

FRANK L. CASTIDY
JR.
"Larry"
CHAIRMAN
Washington
Yana Kerlar
Washington
Jim Krumpton
Idaho
Judi Danielson
Idaho

NORTHWEST POWER PLANNING COUNCIL

851 S.W. SIXTH AVENUE, SUITE 1100
PORTLAND, OREGON 97204-1948

ERIC J. BLOCH
VICE CHAIRMAN
Oregon

John Bragstad
Oregon

Stan Grace
Montana

Lee A. Glacometto
Montana

Fax:
503-820-2370

Phone:
503-222-5161
1-800-452-5161

Internet:
www.nwccouncil.org

July 6, 2001

RECEIVED BY BPA ADMINISTRATOR'S FC-LOG #:
RECEIPT DATE: 7.16.01
DUE DATE: INFO ONLY

The Honorable Spencer Abraham
Secretary of Energy
U.S. Department of Energy
Forrestal Building 1000 Independence Avenue, S.W.
Washington, D.C. 20585

INFO ONLY: KR-7

cc: A-7, D-7, KN/Wash, KR-7C, L-7,
P-6, PG-5, KE-4, DF-2, T/Ditt2

Dear Secretary Abraham:

The Northwest Power Planning Council supports the Bonneville Power Administration's request for additional Federal Treasury borrowing authority for capital improvements to the Federal Columbia River Power System (FCRPS). Needed upgrades and improvements to the high-voltage transmission system, hydroelectric facilities and energy conservation program will require Bonneville to have access to additional capital funds in the near-term.

In particular, this year's West Coast electricity crisis has helped underscore serious constraints and deficiencies within the transmission system. The system is currently operating at or near full capacity, and is under increasing stress. The robust activity in the wholesale power market is pressuring Bonneville to run the system harder and for patterns of transactions for which it was not designed. This is making it more difficult to schedule maintenance and construction activities. In addition, there is serious concern that the transmission system will not have the capacity necessary to handle the new generation in the Northwest that is needed to bring supply and demand back into balance. Bonneville's access to additional borrowing authority is necessary to ensure long-term system reliability for the Northwest and the entire West Coast.

The Council also supports additional borrowing authority for improvements, additions and replacements at hydroelectric facilities within the FCRPS and the fishery mitigation projects associated with them. In 1992, Congress gave Bonneville the authority to enter into direct funding agreements with the Corps of Engineers and the Bureau of Reclamation for upgrades at their hydroelectric projects. Bonneville has a similar direct funding agreement with the U.S. Fish and Wildlife Service for the Lower Snake River Compensation Plan hatcheries. These agreements preclude the need for congressional appropriations for these activities, but increase Bonneville's capital borrowing requirements. The Council recognizes this need and supports new borrowing

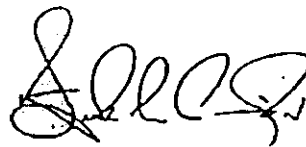
authority to increase the efficiency and reliability of the FCRPS and minimize system impacts on fish and wildlife.

The electricity crisis has also highlighted the importance of vigorous and sustained energy conservation efforts in the Northwest. Unfortunately, during the 1990s, Bonneville's level of investment in conservation decreased substantially due to the emerging competitive electricity market and financial uncertainties. The consequences of this change in policy have been exposed by the astonishingly high electricity prices that we've experienced this past year. Accordingly, it is important that Bonneville regain its leadership in assisting regional utilities and other customers to invest in cost-effective conservation measures while recognizing the market realities of the evolving wholesale power supply market. Additional borrowing authority will allow Bonneville to stimulate such investments throughout the Northwest.

The Council believes that increases in borrowing authority should be accompanied by a high level of accountability in the utilization of the funds. Because the electric ratepayers of the region repay these investments, and because the transmission system supports transactions by several non-federal entities, there is a need to ensure adequate regional participation and oversight in the projects pursued. An open, independent process should be established that identifies least-cost solutions and prioritizes investments that result in a completion schedule of projects. The results of such a process should be included in Bonneville's annual budget submittal for an additional level of accountability. The Council is available to participate in such a process in any way deemed appropriate by the regional entities.

Thank you for your attention to this matter, and please do not hesitate to contact me if you have any questions or comments.

Sincerely,



Frank L. Cassidy, Jr.
Chair

Identical letter sent to: The Honorable Spencer Abraham, Secretary of Energy
Members of the Northwest congressional delegation
House and Senate Committees on Appropriations

Northwest Electric Power Interstate

August 8, 2001

Vice President Richard B. Cheney
The White House
Washington, DC 20501

Dear Mr. Vice President:

We are writing to express our strong support for increasing the amount of funding that the Bonneville Power Administration (BPA) may borrow from the U.S. Treasury.

As investor-owned utilities, consumer-owned utilities, industrial customers, and independent power producers, all doing business in the Pacific Northwest, we often disagree on matters relating to the Northwest power system. But we are absolutely united on at least one point: that substantially increasing the reliability and capacity of the BPA transmission system is essential to the economic health of both the Northwest and the entire West.

The BPA transmission system is already heavily constrained as it attempts to serve existing loads and generation facilities, and the problem is only going to get worse unless dramatic steps are taken. As the report of your Energy Task Force made clear, new generation facilities are essential to solving the electricity crisis. Right now, the call for new generation is being answered -- developers have announced plans to build many new plants in the Northwest. This new generation will benefit consumers in all 11 Western states served by the regional transmission system known as the western interconnection.

But those new generation facilities cannot help solve the supply problem unless they are interconnected to a reliable regional transmission system. Because BPA owns and operates over 75 percent of the high-voltage transmission system in the Northwest, and no major investments have been made in that system for over a decade, the transmission system that would bring these new supplies to consumers is simply not prepared to do the job. Unless relieved through substantial infrastructure improvements, the constraints that plague the BPA transmission system will prolong the current electricity crisis and contribute to future crises.

We understand that solving this problem will not be free. All BPA transmission customers will bear the total costs of BPA's transmission investments through transmission rates. In turn, the revenues from transmission rates will be used by BPA to repay all the money borrowed from the Treasury, with interest. But we cannot move forward toward a solution until the federal government does its part by increasing BPA's borrowing authority.

One recent development gives us, and hopefully you, extra confidence that this new borrowing authority will be well spent. To assure that BPA properly prioritizes its transmission investments, a technical review committee consisting of BPA's transmission customers was recently created, and is already beginning its work. This review process (which received the full support of the Senate Appropriations Committee in its July 13 report on the Energy and Water Development Appropriations bill) will allow meaningful customer input and thereby help assure that BPA's transmission investments will provide the most cost-effective, reliable service for the region's consumers.

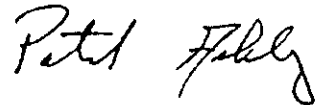
In conclusion, we ask that you put the Administration on record as supporting an increase in BPA's borrowing authority for FY 2002, so that BPA can immediately move ahead on critical, multi-year investments in the transmission system. We also ask that you promptly transmit a statement of your views to the Senate and House Appropriations Committees. With the Administration's support, we are hopeful that this matter will be successfully concluded when those Committees meet in conference on the Energy and Water Appropriations bill after the August recess.



Kris Mikkelsen
General Manager
Inland Power & Light



Al Gonzalez
General Manager
Central Electric
Cooperative, Inc.



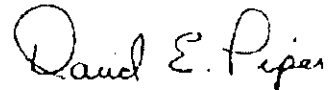
Patrick Ashby
General Manager
Tillamook Public Utility
District



James W. Sanders
General Manager
Benton Public Utility
District



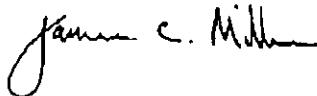
Don Godard
Manager
Grant Public Utility District



David E. Piper
Chief Executive Officer
Pacific Northwest
Generating Company



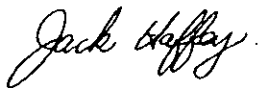
Pamela G. Lesh
Vice President
Public Policy & Regulatory
Affairs
Portland General Electric
Company



James C. Miller
Senior Vice President
Delivery
Idaho Power Company



Brett Wilcox
President
Goldendale Aluminum and
Northwest Aluminum



Jack Haffey
President and Chief
Operating Officer
The Montana Power
Company



Gary Zarker
Superintendent
Seattle City Light



Gary Ely
Chairman, Pres. & CEO
Avista Corp.



Alan Richardson
Chairman of the Board
PacifiCorp



Jerry Leone
Manager
Public Power Council



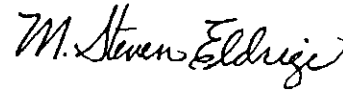
Charles E. Martin
President
National Energy Systems
Company
Sumas Energy, Inc.



Steve Johnson
Executive Director
Washington PUD
Association



Paul T. Champagne
President
PPL Global



M. Steven Eldridge
General Manager & CEO
Umatilla Electric
Cooperative



Mark Gendron
Manager
Idaho Falls Power



Randy L. Berggren
General Manager
Eugene Water & Electric
Board

cc: Secretary of Energy Spencer Abraham
Senate Appropriations Committee Chairman Robert C. Byrd
House Appropriations Committee Chairman C.W. Young
Senate Budget Committee Chairman Kent Conrad
House Budget Committee Chairman Jim Nussle
Senate Energy Committee Chairman Jeff Bingaman
House Energy and Commerce Chairman W.J. "Billy" Tauzin
OMB Director Mitchell E. Daniels Jr.
NW members of Congress
Governor Dirk Kempthorne
Governor John Kitzhaber
Governor Gary Locke
Governor Judy Martz

1a

JOHN A. KITZHABER, M.D.
GOVERNOR



July 16, 2001

The Honorable Robert C. Byrd
Chairman Interior Subcommittee
Senate Committee on Appropriations
SH 123 Hart Senate Office Building
Washington, D.C. 20510-6033

Dear Mr. Chairman:

I am writing in support of the Bonneville Power Administration's request for an additional \$2 billion in borrowing authority from the U.S. Treasury. The additional authority is needed for critical investments in the Northwest's high-voltage transmission system and hydroelectric facilities.

Bonneville owns and operates about 75 percent of the Northwest's high-voltage transmission. Its system is now at or near capacity. As a result, the system cannot carry all the electricity generated from new power plants coming on line. Bonneville must make substantial investments in new transmission capacity to ensure the continued reliability of the Northwest power system.

Also, Bonneville supplies about 40 percent of the electricity used in the Northwest. Most of that supply comes from hydroelectric facilities – many of which are old and need improvements to achieve full efficiency. With added borrowing authority, Bonneville can upgrade these facilities and increase supply by an amount equivalent to the output of a new power plant. In a power-short region, these are needed, timely investments.

I urge you to support Bonneville's request.

Thank you for your consideration of this matter.

Sincerely,

John A. Kitzhaber, M.D.

c: Oregon Delegation
Steve Wright, Acting Administrator, Bonneville Power Administration



Washington DC Office 700 1st Street NW, Suite 250
Washington, DC 20001-4507
202.638.3500
Fax: 202.638.3522

August 14, 2001

Office of the Vice President
Eisenhower Executive Office Building
Washington DC, 20501

Dear Mr. Vice President:

I am writing to express PG&E Corporation's support for efforts to improve the Bonneville Power Administration's (BPA) ability to deliver electricity in the West. Specifically, we endorse the request for additional federal borrowing authority to allow BPA to finance transmission construction.

Significant progress has been made toward returning to a balance in electricity supply and demand in the West. PG&E Corporation's National Energy Group is contributing to this effort. Currently, we have more than 4,000 megawatts of electric generation in construction or development in the region, and we continue to look at potential plant sites. We also are upgrading our natural gas pipeline infrastructure to help ensure the new plants are fueled.

As new generating projects begin to come on-line, the situation in the West undoubtedly will improve from both a supply and price stability perspective. But to get that power to market, we must improve the region's aging transmission systems. We must begin that effort now so that the transmission capacity is ready when the generating capacity becomes available.

As you know, BPA operates one of the most important transmission systems in the West. Because of the broad interconnectedness of the Western System Coordinating Council grid, the ability of BPA to deliver power from Northwest facilities impacts reliability throughout the region. That said, we are very concerned that BPA's transmission system is not prepared to accommodate the new generating facilities now in development or construction in the Northwest.

We understand BPA needs to extend its federal borrowing authority so that it has the financial means to make critically needed transmission upgrades. We support this effort as an important component of the overall effort to solve the West's energy problems. We also strongly urge Bonneville to begin immediately to plan for transmission upgrades in the most critical corridors. Priority should be given to transmission serving areas where advance plant construction and development are underway in order that plants ready for construction can be assured that BPA will provide transmission service coincident with their completion.

Please don't hesitate to call me at any time if I can be of assistance to you.

Sincerely,

cc: Honorable Robert C. Byrd
Honorable Ted Stevens
Honorable Harry Reid
Honorable Pete Domenici
Honorable Larry Craig
Honorable Conrad Burns
Honorable Diane Feinstein
Honorable Patty Murray
Mr. Stephen Wright

JUN-25-2001 16:48

PG&E CORPORATION

2026383526

P.02/02



Steven L. Kline
Vice President
Federal Governmental &
Regulatory Relations

700 11th Street NW, Suite 250
Washington, DC 20001

202.638.3500

Fax: 202.638.3522

Internet: steven.kline@pge-corp.com

June 25, 2001

The Honorable Spencer Abraham
Secretary of Energy
1000 Independence Ave.
Washington, DC 20585-0001

Dear Secretary Abraham:

I am writing today to express PG&E Corporation's support for efforts by the Bonneville Power Administration (BPA) to improve its ability to deliver power in the West. Specifically, we would like to endorse BPA's request for additional federal borrowing authority to finance transmission construction.

As you know, significant progress has been made toward returning to supply/demand balance in the West. PG&E Corporation's National Energy Group is contributing to this effort. Currently, we have more than 4,000 megawatts in construction or development in the region, and we continue to look at potential sites. We also are upgrading our natural gas pipeline infrastructure to help ensure the new plants are fueled.

As new generating projects begin to come on line, the situation in the West undoubtedly will improve from both a supply and price stability perspective. But to get that power to market, we must improve the region's aging transmission systems. And we must begin that effort now so that the transmission capacity is ready when the generating capacity becomes available.

BPA operates one of the most important transmission systems in the West. Because of the broad interconnectedness of the Western System Coordinating Council grid, the ability of BPA to deliver power from Northwest facilities impacts reliability throughout the region. That said, we are very concerned that BPA's transmission system is not prepared to accommodate the new generating facilities now in development or construction in the Northwest.

We understand BPA is seeking to extend its federal borrowing authority so that it has financial means to make critically needed transmission upgrades. We support this effort as an important component of the overall effort to solve the West's energy problems. We also strongly urge BPA to begin immediately planning for transmission upgrades in the most critical corridors. Priority should be given to transmission serving areas where advance plant construction and development are underway. We are concerned that projects ready for construction cannot get a commitment from BPA to provide transmission service coincident with the completion of construction.

As always, Mr. Secretary, we greatly appreciate your attention to the issues in the West and your commitment to working with the region to address the many challenges facing us.

Please don't hesitate to call me at any time if I can be of assistance to you.

Sincerely,

cc: Mr. Steven Wright



July 11, 2001

RECEIVED BY BPA ADMINISTRATOR'S OFC-LOG #: 01-0373
RECEIPT DATE: 7/16/01
DUE DATE: INFO ONLY

Steven L. Kline
Vice President
Federal Governmental &
Regulatory Relations

700 11th Street NW, Suite 250
Washington, DC 20001
202.638.3500
Fax: 202.638.3522
Internet: steven.kline@pge-corp.com

Honorable Mitchell E. Daniels, Jr.
Director
Office of Management & Budget
Eisenhower Executive Office Building
17th & Pennsylvania Avenue, NW
Washington DC, 20503

**INFO ONLY: A-7, D-7, KN/Wash, L-7,
P-6, T/Ditt2, DF-2**

Dear Director Daniels:

I am writing to express PG&E Corporation's support for efforts to improve the Bonneville Power Administration's (BPA) ability to deliver electricity in the West. Specifically, we endorse the request for additional federal borrowing authority to allow BPA to finance transmission construction.

Significant progress has been made toward returning to a balance in electricity supply and demand in the West. PG&E Corporation's National Energy Group is contributing to this effort. Currently, we have more than 4,000 megawatts of electric generation in construction or development in the region, and we continue to look at potential plant sites. We also are upgrading our natural gas pipeline infrastructure to help ensure the new plants are fueled.

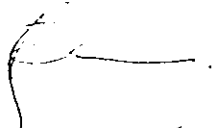
As new generating projects begin to come on line, the situation in the West undoubtedly will improve from both a supply and price stability perspective. But to get that power to market, we must improve the region's aging transmission systems. We must begin that effort now so that the transmission capacity is ready when the generating capacity becomes available.

As you know, BPA operates one of the most important transmission systems in the West. Because of the broad interconnectedness of the Western System Coordinating Council grid, the ability of BPA to deliver power from Northwest facilities impacts reliability throughout the region. That said, we are very concerned that BPA's transmission system is not prepared to accommodate the new generating facilities now in development or construction in the Northwest.

We understand BPA needs to extend its federal borrowing authority so that it has the financial means to make critically needed transmission upgrades. We support this effort as an important component of the overall effort to solve the West's energy problems. We also strongly urge Bonneville to begin immediately to plan for transmission upgrades in the most critical corridors. Priority should be given to transmission serving areas where advance plant construction and development are underway in order that plants ready for construction can be assured that BPA will provide transmission service coincident with their completion.

Please don't hesitate to call me at any time if I can be of assistance to you.

Sincerely,


cc: Mr. Stephen Wright ✓
Honorable Harry Reid
Honorable Pete Domenici
Honorable Larry Craig
Honorable Conrad Burns
Honorable Diane Feinstein



Portland General Electric Company
121 SW Salmon Street • Portland, Oregon 97204
(503) 464-8401 • Fax (503) 778-5566

July 12, 2001

Chairman Robert C. Byrd
Senate Committee on Appropriations
311 Senate Hart Office Building
Washington, DC 20510

Peggy Y. Fowler
CEO and President

RECEIVED BY BPA ADMINISTRATOR'S OFC-LOG #: 01-0371
RECEIPT DATE: 7-13-01
DUE DATE:

INFO ONLY

Info Only: A, D, KN, DF, L, P, T

Dear Chairman Byrd:

I am writing to express Portland General Electric Company's support for increasing the transmission borrowing authority of the Bonneville Power Administration (BPA) as part of the Energy and Water Appropriations bill. We believe that this is a critical step toward improving the capacity and reliability of the transmission system for the benefit of consumers throughout the Pacific Northwest. We are also pleased BPA has agreed to form a technical review committee with its transmission customers to assure that transmission improvements are prioritized to provide the most cost-effective and reliable service for the region.

We look forward to working cooperatively with BPA to review proposed capital projects and helping assure dependable transmission in the region. We respectfully request that language in support of the formation of this committee be included in your Committee report.

If you or your staff have any questions, please feel free to call me.

Sincerely,

Peggy Fowler

cc: ✓ Steve Wright, BPA - Acting Administrator and CEO
Jeff Stier, BPA - Vice President
Secretary of Energy Spencer Abraham
Senator Patty Murray
Senator Gordon Smith
Senator Ron Wyden
Michael A. Andrews, Vinson and Elkins



October 15, 2001

Mitchell E. Daniels, Jr.
Director
Office of Management and Budget
725 17th Street NW
Washington, D.C. 20503

Dear Mr. Daniels:

On behalf of the 114 Northwest consumer-owned utilities that are members of the Public Power Council (PPC), I am writing to express our support for increasing by \$2 billion the amount of funding that Bonneville Power Administration (BPA) may borrow from Treasury. PPC supports this increase for three reasons:

1. The region's transmission system, 75% of which is owned by BPA, is now heavily constrained, and the problem will worsen unless dramatic steps are taken soon. BPA has not made substantial upgrades to its transmission facilities for well over a decade despite rapid growth in the Northwest. Considerable amounts of new generation are planned for the Northwest. While new generation will benefit all 11 western states, it must be connected to a reliable transmission grid. Building and maintaining the needed transmission infrastructure requires BPA to make significant capital investments. BPA's current borrowing authority is insufficient to fund the needed investments. (We are aware that the Administration is considering conditioning BPA's borrowing authority for transmission upon solicitation of third-party partners. We urge you to ensure that any third-party financing or ownership be available to *all* potential participants, including consumer-owned utilities, and that participants be selected on the basis of lowest bid so that we do not "bid-up" the cost of regional transmission assets.)

2. From the 29 federal hydroelectric projects, BPA markets nearly half of the electricity consumed in the Northwest. The energy available from these projects declined during the 1990s due to deferred maintenance, and it is time to restore the full capability of the hydro system. Restoring this capability will provide more energy to the western energy market at a cost below that of constructing new generation, and will provide additional capacity needed to keep the lights (and heat) on in the event of an "Arctic Express" cold weather event. BPA's current borrowing authority is insufficient to fund the needed investments.

ALAN RICHARDSON
Chairman

825 N.E. Multnomah, Suite 2000
Portland, Oregon 97232-4116
(503) 813-6765
FAX (503) 813-7109



July 11, 2001

The Honorable Robert C. Byrd
Chairman, Committee on Appropriations
United States Senate
Washington, D.C. 20510

RECEIVED BY BPA ADMINISTRATOR'S OFC-LOG #: 01-0367
RECEIPT DATE: 7-12-01
DUE DATE: INFO ONLY

A, D, KN, DF, L, P, T

Dear Senator Byrd:

PacifiCorp supports an increase in borrowing authority for the Bonneville Power Administration (BPA) as part of H.R. 2311, the Fiscal Year 2002 Energy and Water Appropriations that may be considered by your Committee July 12, 2001.

PacifiCorp is an investor-owned utility serving 1.5 million retail electric consumers in six western states.

By permitting Bonneville to make additional investments in its transmission network, this increase in borrowing authority would represent a critical step toward needed improvements in the capacity and reliability of BPA's transmission system. Such investments need to be made for the benefit of all electric consumers throughout the Pacific Northwest and, indirectly, the entire west.

Bonneville has agreed to form a technical review committee with its transmission customers to help assure that transmission improvements are prioritized to provide the most cost-effective and reliable service for the region. We respectfully request the Report accompanying the Committee's action on H.R. 2311 reflect positively on the formation of this committee.

Thank you for your consideration of our request.

Sincerely,

A handwritten signature in dark ink, appearing to read "Alan V. Richardson", with a stylized flourish at the end.

Alan V. Richardson
Chairman of the Board

Cc: The Honorable Ted Stevens
The Honorable Harry Reid
The Honorable Pet V. Domenici
The Honorable Patty Murray
The Honorable Larry E. Craig
Steve Wright, BPA



RECEIVED BY BPA ADMINISTRATOR'S OFC-LOG #: 01-0366
RECEIPT DATE: 7-12-01
DUE DATE: INFO ONLY

July 12, 2001

A, D, KN, DF, L, P, T

Chairman Robert C. Byrd
Senate Committee on Appropriations
311 Senate Hart Office Building
Washington, DC 20510

Dear Chairman Byrd:

I am writing to express Puget Sound Energy, Inc.'s support for increasing the borrowing authority of the Bonneville Power Administration (BPA) to facilitate the construction of additional electric transmission facilities. This funding is critically important to improve the capacity and reliability of BPA's transmission system for the benefit of consumers throughout the Pacific Northwest.

I am pleased that BPA has recently agreed to form a review committee so that its transmission customers can be assured that transmission improvements are economically justified and prioritized so as to provide the most cost-effective and reliable service for the region. Puget Sound Energy will gladly participate in the important work to be undertaken by this review committee. It would be appropriate for language supporting the formation of this committee to be included in your Committee report.

If you or your staff have any questions about Puget Sound Energy's support for additional BPA borrowing authority, please contact Bill Gaines, Puget Sound Energy's Vice President, Energy Supply at (425) 462-3145.

Sincerely,

A handwritten signature in cursive script, appearing to read 'William S. Weaver'.

William S. Weaver
President and Chief Executive Officer

cc: Secretary Spencer Abraham
Senator Patty Murray
Stephen Wright - Acting Administrator, BPA



City of Seattle

Paul Schell, Mayor
Seattle City Light
Gary Zarker, Superintendent

RECEIVED BY BPA ADMINISTRATOR'S
UFC LOG #: 01-0383
RECEIPT DATE: 7.18.01
DATE:
INFO ONLY

July 17, 2001

INFO ONLY: A-7, D-7, KN/Wash, L-7,
P-6, PG-5, KE-4, DF-2, T/Ditt2,
Cindy Custer-KR/WSGL

Robert C. Byrd
Chairman, Senate Committee on Appropriations
311 Hart Senate Office Building
Washington, DC 20510

Chairman Byrd:

As you know, the Bonneville Power Administration (BPA) has sought a \$2 billion increase in borrowing authority to primarily finance transmission expansion projects in the Pacific Northwest. The current language in the Energy and Water Appropriations bill authorized \$2 billion, but makes spending subject to annual appropriation. I urge you to support in conference language approved the Energy and Water subcommittee that does not condition bonding authority on the annual appropriations process.

I believe that the Northwest, like many parts of the country, has under-invested in transmission. Much of that is attributable to uncertainty over industry structure and cost recovery. Much is also attributable to a surplus of generation and transmission capacity along the West Coast. The problems of the last year have made us acutely aware of the need for substantial investment in generation and transmission by public utilities, private utilities, independent power producers, and Bonneville.

The principal difficulty with an annual appropriations process is that it prevents investments in capital intensive, long-lead time transmission projects. Substantial investments are needed immediately to address congested paths in Puget Sound. We have been subject to a number of transmission curtailments this year that prevent our access to power from Boundary dam. Investor owned utilities in the northwest have faced the same problem – the “west of Hawaii” problem – bringing in power from generation they own in Montana and Wyoming. Northwest congestion greatly impairs our ability to assist California in summer, and vice versa in winter. In addition to relief of congested paths, Bonneville must add transmission capacity to support new generating projects being built in the region. We believe that we cannot wait for the formation of a FERC-jurisdictional Regional transmission Organization to decide on a perfect expansion plan.

700 Fifth Avenue, Suite 3300, Seattle, WA 98104-5031
Tel: (206) 684-3000, TDD: (206) 684-3225, Fax: (206) 625-3709

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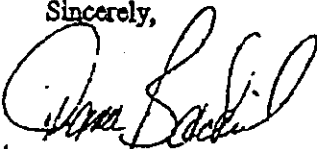


Chairman Robert C. Byrd
July 17, 2001
Page 2

I do share the concern of Northwest investor owned utilities that BPA investments address top priority problems in a cost-effective manner. They should focus on interconnecting generation and resolving congestion in projects that are not likely candidate investments for other parties. A technical review committee can provide guidance on these issues to the Administrator.

I'd like to reiterate my support for an energy and water appropriations bill that includes \$2 billion in increased BPA borrowing authority, not subject to authorizations on an annual basis. I would be delighted to answer any questions you have on this issue.

Sincerely,


for Gary Zarker
Superintendent

JH:smb

cc: Senator Patty Murray
Senator Maria Cantwell
Representative Jay Inslee
Representative Rick Larsen
Representative Brian Baird
Representative Doc Hastings
Representative George Nethercutt
Representative Norman Dicks
Representative Jim McDermott
Representative Jennifer Dunn
Representative Adam Smith



Main office: 424 Third Avenue W, Suite 100 • Seattle, WA 98119 • (206) 286-4455 • (206) 286-4454 fax

Field offices: 2031 SE Belmont Street • Portland, OR 97214 • (503) 230-0421 • (503) 230-0677 fax
 1511 N Eleventh Street • Boise, ID 83702 • (208) 345-9067 • (208) 343-9376 fax
 419 Sixth Street, Suite 328 • Juneau, AK 99801 • (907) 586-6667 • (907) 463-3312 fax
 also in Washington, DC and Spokane, WA

Alaska Trollers Association
 American Rivers
 Antioch Living Systems Collective
 Association of Northwest Steelheaders
 Boulder-White Clouds Council
 Clearwater Forest Watch
 Coalition for Salmon and Steelhead Habitat
 Coast Range Association
 Defenders of Wildlife
 Earth Justice Legal Defense Fund
 Federation of Fly Fishers
 Friends of the Earth
 Idaho Conservation League
 Idaho Rivers United
 Idaho Steelhead and Salmon Unlimited
 Idaho Wildlife Federation
 Institute for Fisheries Resources
 Jack Walton League - Greater Seattle Chapter
 Lands Council
 Long Live the Kings
 The Mountaineers
 Natural Resources Defense Council
 North Cascades Conservation Council
 Northwest Ecosystem Alliance
 Northwest Environmental Defense Center
 Northwest Resource Information Center
 Northwest Sportfishing Industry Association
 NW Energy Coalition
 Oregon Natural Desert Association
 Oregon Natural Resources Council
 Oregon Outdoors Association
 Oregon Trout
 Oregon Wildlife Federation
 Pacific Coast Federation of Fishermen's Associations
 Pacific Marine Conservation Council
 Puget Sound Gillnetters Association
 Purse Seine Vessel Owner's Association
 River Network
 Rivers Council of Washington
 Salmon For All, Inc.
 Salmon For Washington
 Sawtooth Wildlife Council
 Sierra Club
 The Wilderness Society
 Trout Unlimited
 Washington Kayak Club
 Washington Trollers Association
 Washington Wilderness Coalition
 Water Watch of Oregon
 Wild Angels
 Willamette Riverkeepers

September 27, 2001

The Honorable Sonny Callahan
 U.S. House of Representatives
 Chairman
 Subcommittee on Energy & Water
 Washington, DC 20515

The Honorable Harry Reid
 United States Senate
 Chairman
 Subcommittee on Energy & Water
 Washington, DC 20510

The Honorable Peter J Visclosky
 U.S. House of Representatives
 Ranking Member
 Subcommittee on Energy & Water
 Washington, DC 20515

The Honorable Pete V. Domenici
 United States Senate
 Ranking Member
 Subcommittee on Energy & Water
 Washington, DC 20510

RE: Increased Borrowing Authority for Bonneville Power Administration

Dear Sirs:

We are writing on behalf of the Save Our *Wild* Salmon Coalition (SOS) and the undersigned organizations to raise our concerns about the new borrowing authority provision included in the Senate's Fiscal Year 2002 Energy and Water Appropriations Bill (S. 1171). SOS is a coalition of fishermen, conservationists, recreational water users, and conservation and renewable energy advocates working towards a common goal: to restore abundant, harvestable wild salmon and steelhead populations to the rivers and streams of the Northwest. It has come to our attention that S. 1171 contains legislative language that would authorize up to \$2 billion in new borrowing authority for the Bonneville Power Administration (BPA). SOS is deeply concerned with this proposal, and believes as currently crafted could further harm salmon in the Columbia River Basin

First, we are concerned that this request has not been subject to adequate Congressional or public review, and does not ensure any accountability over the use of these funds. Without public review, it is difficult for both the public and for Congressional leaders to adequately assess the benefits and drawbacks from such a proposal. SOS has consistently opposed riders to appropriation bills that have not undergone similar reviews because we believe that to create laws in this manner is simply bad public policy. In this situation, this provision as written may have unintended negative consequences for salmon and salmon dependent communities as well. SOS sees no immediate need so urgent that this provision should be rushed through Congress without thoughtful debate and review. In addition to the procedural concerns, SOS has several substantive concerns with the current proposal. Subsequently, we urge you to delete the provision from the final conference report unless you are able to amend it to address the following concerns. As currently crafted, SOS cannot support BPA's request for additional borrowing authority.

SOS is particularly concerned that BPA's request for this funding does not include any increased commitment, whether monetary or otherwise, to strengthen and improve its Fish and Wildlife Program. This oversight comes in the wake of one of the worst juvenile salmon migration seasons on record -- due primarily to BPA's refusal to abide by the river operations requirements set forth in the 2000 Federal Salmon Recovery Plan. Since early spring, BPA has drastically curtailed the required program to spill water over its dams to aid the migration of juvenile salmon downstream. This program was curtailed -- and in some instances suspended -- subject to the guidelines of "emergency criteria" which specifically calls on federal action agencies to evaluate the adequacy of financial reserves, among other things, before implementing or suspending salmon recovery measures.

For BPA to request this sweeping increase in its borrowing authority, without any guarantee that it will fully fund and indeed implement salmon recovery measures required by law defies Congressional intent in passing the Northwest Power Act and the Endangered Species Act. The Northwest Power Act calls on BPA, as well as other federal action agencies, to operate the Federal Columbia River Hydropower System (FCRPS) in a manner that provides *equitable treatment* to fish and wildlife with other uses of the system. The Biological Opinion on the Federal Columbia River Power System (FCRPS), established to meet the Endangered Species Act requirements, set forth specific river operations necessary to protect and recover salmon in the Columbia River Basin. This year's river operations have been in flagrant violation of both mandates.

SOS wholly disagrees with the validity of these suspensions and urges Congress to demand that BPA meet its legal obligations -- including removal of the "emergency declaration" -- to protect and restore fish and wildlife impacted by the FCRPS as a requirement to receive new borrowing authority.

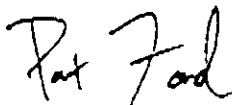
Additionally, Congress should ensure that public purposes get first preference for use of the funds. There is no explicit commitment that BPA use this influx of capital to acquire conservation, invest in new non-hydro renewable resources or restore fish and wildlife. This would require two specific additional amendments. First, you would need to include language in the final report that states that preference for funds must be given to projects that support conservation, renewable resources and fish restoration obligations. Second, you would need to include an amendment to the Northwest Conservation Act, as this is what allows BPA to spend the money on conservation, renewables and fish as well as amending the Federal Columbia River Transmission System Act. Energy conservation and other demand-side management programs, in particular, play a vital role in reducing the burden on the Columbia and Snake rivers while ensuring a reliable power system and sustainable salmon.

populations. Any additional BPA borrowing authority should require that BPA use a percentage of the additional funds for conservation measures.

Finally, SOS is concerned that the current proposal does not incorporate least cost planning principles into transmission decisions. There is no requirement that BPA explore and evaluate alternatives to new transmission construction or system upgrades, such as distributed generation. The Senate language requires only that BPA use this funding to assist in financing the construction, acquisition and replacement of BPA's transmission system. Some transmission upgrades may be avoided through other cost-effective alternatives such as demand reductions. Any additional BPA borrowing authority should include a provision that ensures that any funds used for transmission upgrades is only used after an assessment of all potentially practicable and cost-effective alternatives, including but not limited to targeted demand reductions and distributed renewable generation options.

While we recognize that BPA may need additional borrowing authority to meet future transmission upgrades and salmon protection needs, SOS does not believe that BPA needs this funding at this time. SOS urges Conferees to delete the provision from the final conference report unless you are able to amend it to address these concerns. Any requests for additional borrowing authority should be contingent on specific language guaranteeing that BPA will fully implement its obligations under the new salmon recovery plan, as well as requirements that funds be spent on least cost transmission system measures and demand-side management activities. SOS would be happy to work with the relevant committees, or provide you with any information to ensure that these mechanisms are put in place.

Sincerely,



Pat Ford, Save Our Wild Salmon

Bill Arthur, Sierra Club

Shawn Cantrell, Friends of the Earth

Glenn Spain, Pacific Coast Federation of Fisherman's Associations & Institute for Fisheries Resources

Tim Stearns, National Wildlife Federation

Bill Sedivy, Idaho Rivers United

Lovenia Warren, Salmon For All

Liz Hamilton, Northwest Sportfishing Industry Association

Sara Patton, NW Energy Coalition

CC: Conferees, FY02 Energy & Water Appropriations Bill
Stephen Wright, Acting Administrator, Bonneville Power Administration



STATE OF WASHINGTON

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

1300 S. Evergreen Park Dr. S.W., P.O. Box 47250 • Olympia, Washington 98504-7250
(360) 664-1160 • TTY (360) 586-8203

July 11, 2001

The Honorable Spencer Abraham, Secretary
Department of Energy
Forrestal Building
1000 Independence Ave. SW
Washington D.C. 20585

RECEIVED BY BPA ADMINISTRATOR'S GFC-LOG #: 01-0379
RECEIPT DATE: 7-16-01
DUE DATE: INFO ONLY

Dear Secretary Abraham:

We write to express our support for the Bonneville Power Administration's (BPA) request for an increase to its borrowing authority from the U.S. Treasury. BPA estimates that infrastructure projects necessary to improve transmission capability and hydropower efficiency will require approximately \$2 billion in additional borrowing authority.

BPA is a integral and essential part of both the generation and the transmission infrastructure in the Northwest. It owns and operates about 75 percent of the high voltage transmission in our region. Those transmission facilities are currently operating at or near capacity levels. Additional transmission capacity is needed to allow for the integration of new electricity generation facilities that are being proposed to meet growing demand in Washington and throughout the Northwest. BPA needs to make increased capital investments soon not only to integrate this new generation, but also to preserve the reliability of the existing transmission system.

The Federal Columbia River Power System (FCRPS) contributes about 40 percent of the region's firm electricity generation. Many of these hydroelectric facilities are 40 years or more old and need updates and improvements to maximize their efficiency. BPA informs us that with increased investment in these facilities it will be possible to increase generation capability by as much as 300 aMW. These investments are cost-effective -- they will return more than the cost of capital -- and would contribute importantly to the region's need for new generating capability.

In March of this year, the Federal Energy Regulatory Commission (FERC) identified infrastructure enhancements in transmission and hydropower efficiency as critical to

INFO ONLY: A-7, D-7, KN/Wash, L-7,
P-6, PG-5, KE-4, DE-2, T/Dit2,
Cindy Custer-KR/WSGL

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Secretary Abraham
July 11, 2001
Page 2 of 2


meeting the growing power needs of the West.¹ We believe that BPA's request for additional borrowing authority will permit it to undertake projects that address the problem FERC has identified. Given the recent unprecedented upward pressure on BPA rates caused by runaway prices in the wholesale power market, we are concerned that needed infrastructure investments may not happen in a timely manner without this additional borrowing authority.

We urge your support of the additional borrowing authority requested by BPA. Thank you very much for your help and attention.


Sincerely,



Marilyn Showalter, Chairwoman
Washington Utilities and Transportation Commission



Richard Hemstad, Commissioner
Washington Utilities and Transportation Commission



Patrick Oshie, Commissioner
Washington Utilities and Transportation Commission

cc: ✓ Stephen J. Wright, Acting Administrator, BPA
The Honorable Senator Patty Murray
The Honorable Senator Maria Cantwell
The Honorable Representative Jay Inslee
The Honorable Representative Rick Larsen
The Honorable Representative Brian Baird
The Honorable Representative Doc Hastings
The Honorable Representative George R. Nethercutt, Jr.
The Honorable Representative Norman D. Dicks
The Honorable Representative Jim McDermott
The Honorable Representative Jennifer Dunn
The Honorable Representative Adam Smith

¹ Order Removing Obstacles to Increased Electric Generation and Natural Gas Supply in the Western United States and Requesting Comments on Further Actions to Increase Energy Supply and Decrease Energy Consumption. Docket #EL01-47-000. Federal Energy Regulatory Commission. March 14, 2001.

2001-016257 7/9 A 10:53

GARY LOCKE
GovernorSTATE OF WASHINGTON
OFFICE OF THE GOVERNOR

P.O. Box 40002 • Olympia, Washington 98504-0002 • (360) 753-6780 • TTY/TDD (360) 753-6466

July 6, 2001

The Honorable Spencer Abraham
Secretary of Energy
United States Department of Energy
James Forrestal Building
1000 Independence Avenue S.W.
Washington, D.C. 20585

Dear Secretary Abraham:

I am writing to express my strong support for the Bonneville Power Administration's (BPA's) request to increase its borrowing authority from the U.S. Treasury.

BPA estimates that it will need approximately \$2 billion in additional authority to help finance new capital investment for transmission, generation and conservation. Because BPA is such an integral part of both the generation and the transmission system in the Pacific Northwest, it is critical that BPA have sufficient borrowing authority to ensure that these infrastructure improvements are made in a timely manner.

BPA's transmission system accounts for about 75 percent of the high voltage transmission in the Pacific Northwest. It is now at or near capacity. Additional transmission capacity is needed to allow for the integration of the new generation being proposed for the Northwest. BPA needs to make increased capital investments soon to handle this new generation and preserve the reliability of the current transmission system.

In addition, the Federal Columbia River Power System contributes about 40 percent of the region's firm energy. Many of these hydroelectric facilities are more than 40 years old and need updates and improvements to maximize their efficiency. With increased investment in these facilities it will be possible to increase generation capability by as much as 300 average megawatts. The investments in system efficiencies surely will return more than the cost of capital.

For these reasons, I urge you to support BPA's request within the Administration and before Congress. Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Locke".
Gary Locke
Governor